

Australian Energy Market Commission

FINAL REPORT

Review into the scope of economic regulation
applied to covered pipelines

3 July 2018

REVIEW

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About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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Summary

The Council of Australian Governments (COAG) Energy Council requested that the Australian Energy Market Commission (Commission or AEMC) review the economic regulatory framework that currently applies to covered transmission and distribution natural gas pipelines across Australia. This framework has not been comprehensively reviewed since the inception of the National third party access code for natural gas pipeline systems in 1997.

This report sets out recommendations by the Commission to improve the economic regulation applied to full and light regulation transmission and distribution gas pipelines. If implemented in full, the package of recommendations will assist pipeline users and prospective users to negotiate lower prices and better terms for their gas transportation agreements. A broader range of pipeline services will be subject to access arrangements, prices for services will be set at more efficient and cost reflective levels, contract terms will be more balanced, greater information will be provided to pipeline users to aid their negotiations, and arbitration will act as a more credible back-stop if negotiations fail.

Previous AEMC reforms, such as the East coast gas review recommendations that the Gas Market Reform Group is currently implementing, have made it easier to buy and sell gas in the wholesale markets. This review adds to the AEMC's reform package by making it easier and less costly to move that gas to where it is most valued.

Overview of the current pipeline regulatory regime

The regulatory framework that applies to natural gas pipelines plays an important role in supporting users to negotiate gas transportation agreements that meet their needs. It aims to address concerns about potential monopoly pricing by pipeline service providers.

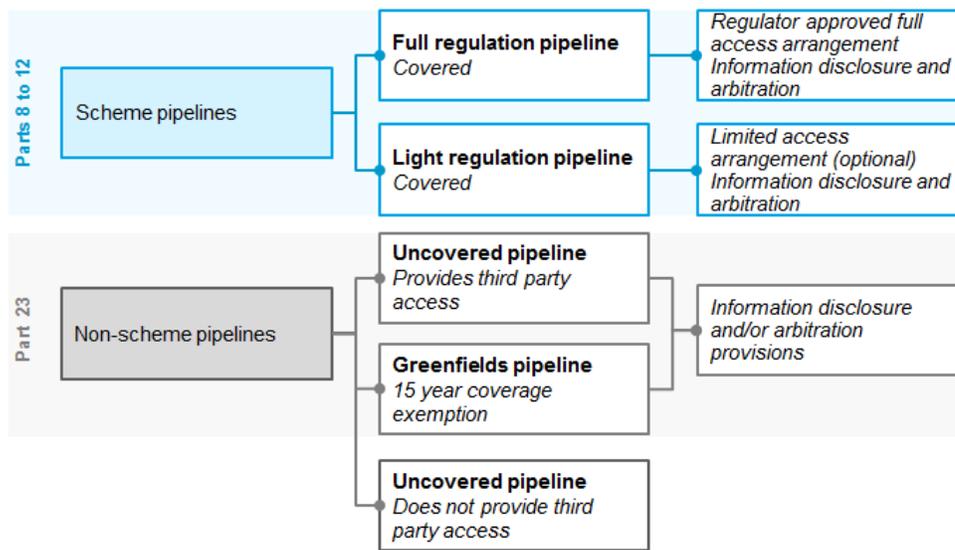
The current regulatory framework classifies pipelines as either scheme pipelines or non-scheme pipelines.

Scheme pipelines (also known as covered pipelines) are subject to regulatory oversight by the Australian Energy Regulator or the Economic Regulatory Authority of Western Australia. There are two forms of regulation that may be applied: full and light regulation, to both transmission and distribution pipelines.

Alternatively, a pipeline will be classified as a non-scheme pipeline. These pipelines are required to comply with the information provision and arbitration requirements of the access regime for non-scheme pipelines under Part 23 of the National Gas Rules (NGR). This access regime commenced in August 2017 and is not the subject of this current AEMC review.

The different key classifications of pipelines and the relevant regulatory regimes are illustrated in Figure 1 below.

Figure 1 Overview of pipeline classifications



In every case, the form of access regulation is a negotiate-arbitrate regime. Pipeline service providers and prospective users negotiate the terms, conditions and tariffs for access to pipeline services to be included in a gas transportation agreement. Binding arbitration can be used when the negotiation process fails to lead to an agreed outcome.

To aid the negotiation and arbitration processes for a full regulation pipeline, the AER and ERA must approve a full access arrangement. The defining feature of a full access arrangement is that it sets out one or more reference services and the associated reference tariffs, and non-tariff terms and conditions, to inform negotiations.

For light regulation pipelines, service providers are required to comply with information provision requirements to aid in negotiations and arbitrations for services provided by these pipelines. Alternatively, light regulation pipeline service providers may seek regulatory approval for a limited access arrangement.

The Commission's recommendations

The Commission's recommendations retain the fundamental features of the regulatory framework for scheme gas pipelines: a negotiate-arbitrate regime, with information provision requirements, and, in the case of full regulation, full access arrangements.

However, the Commission recognises that for a negotiate-arbitrate framework to successfully constrain market power and support informed contract negotiations, all of the individual elements of the regime need to function well and work together. With this in mind, the Commission has identified a number of shortcomings in the current regime for scheme pipelines, in particular that:

- too narrow a set of services are subject to the determination of a tariff by the regulator
- expansions of full regulation pipelines are not always subject to full regulation, increasing the risk of monopoly pricing for use of the expanded capacity
- information disclosure requirements for light regulation pipelines are limited, making it more difficult for users to engage in informed negotiations

- arbitration is not regarded as a credible threat to the use of market power by service providers in contract negotiations.

As a result, the Commission has made a number of significant recommendations to strengthen the economic regulation that applies to full and light regulation pipelines. Most of these recommendations are similar to the draft recommendations made in February 2018. The exceptions to this are in relation to the framework to determine the form of regulation to apply to a pipeline, depreciation, and the application of state commercial arbitration acts to disputes under Part 23 of the NGR.

The Commission's key recommendations in this final report include:

- A new approach to determine which pipeline services should be specified as reference services in a full access arrangement. The new approach responds to concerns from many stakeholders that additional services should be specified as reference services so that the regulator sets the efficient tariff for each of those services to assist prospective users in negotiating a gas transportation agreement. The new approach includes new criteria for determining appropriate reference services. This reflects that recent changes in the dynamics of the east coast gas market have resulted in services such as bi-directional transport becoming more important for many users. The new approach will also provide users with greater opportunity for engagement regarding the decision to determine reference services as well as providing regulators with a specific framework to focus on this important element at an early stage of the access arrangement assessment process.
- Strengthened information reporting obligations on full and light regulation pipeline service providers. The publication of timely and relevant information by service providers is critical to aid users and prospective users in negotiating with a service provider. Substantial changes are recommended to address the information asymmetry issues identified by stakeholders. These changes apply many of the information provision obligations that already apply to Bulletin Board pipelines and non-scheme pipelines under Part 23 of the NGR. The recommended changes will result in more relevant, timely and accessible information for users and prospective users to inform their negotiations with service providers.
- Requiring the regulators to calculate an initial capital base for light regulation pipelines, where a valuation does not already exist. This valuation will provide additional information to support contract negotiations and must be used in arbitrations.
- Making arbitration a more credible threat to constrain the use of market power by clarifying the bases for access determinations, improving the arbitration process and enhancing its transparency. A new fast-tracked arbitration process is also recommended to be available to users and prospective users under certain circumstances, to address concerns that the current process is too slow, and so not useful to prospective access seekers.
- Reducing the ability for service providers to exercise market power over pipeline expansions. This will be achieved by treating all pipeline expansions as part of the relevant scheme pipeline, and so applying either light or full regulation (as

relevant to the original pipeline) to the expansion. In addition, existing extensions may also be incorporated into an existing access arrangement, bringing related pipeline assets under one regulatory framework. These changes will also reduce the regulatory burden and support improved decision-making by regulators.

- Enabling regulators to determine more efficient tariffs and non-tariff terms and conditions set in access arrangements so that users do not pay for services or terms and conditions that they do not use. This will be achieved by amendments and clarifications in the assessment criteria for capital expenditure, cost allocation requirements and non-tariff terms and conditions.;
- Facilitating greater stakeholder engagement in the access arrangement assessment process. Adjustments to the access arrangement assessment process will provide more time for stakeholder engagement, in order to enable the regulator to make more informed decisions in the long-term interest of consumers (in addition to the introduction of the separate reference service process noted above).
- Improving regulatory decision making through the removal of the limitations on regulatory discretion applied to certain elements of an access arrangement so that it is clear that the regulator has the power to make decisions that best contribute to the national gas objective in relation to all aspects of an access arrangement.

In addition, the Commission has considered the governance and processes by which the form of regulation applied to a pipeline is determined under the NGL and Parts 4 and 7 of the NGR. Specifically, it has found that the current order and construction of the tests which determine the form of regulation that applies to a pipeline are not consistent with good regulatory practice. This may result in an inappropriate form of regulation applying to a particular pipeline: either under-regulation (with the prospect of market power being exercised by service providers) or over-regulation (with increased costs of regulation flowing through to consumers).

Stakeholders have engaged significantly in the debate about the nature and extent of the problem throughout this review. However, there has only been high-level engagement on what, if any, changes should be made to address it. . In addition, comprehensively addressing it would require changes to parts of the NGL and NGR that are outside of the scope of this review.

Nevertheless, it has become evident that there is a need to develop better governance and processes by which the form of regulation applied to a pipeline is determined under the NGL and NGR so that it aligns with the NGO and the COAG Energy Council vision for the Australian gas market.

While the Commission is conscious of the extent of reforms that are already occurring in the energy sector and the views from some gas pipeline service providers that this issue should not be considered further at this point in time, the Commission considers that this is an important issue and the already scheduled 2019 post-implementation review of the access regime for non-scheme pipelines provides a suitable time and process to consider these matters further.

For these reasons, the Commission has recommended that it carry out a review into these issues in 2019 at the same time as, or as part of, the review into the operation of Part 23 of the NGR.

All of the recommendations made by the Commission are set out in section 2.3 of this report with detailed discussion on each included in the relevant chapters.

Next steps

This final report is accompanied by draft amendments to the NGR and a description of changes required to the NGL to implement the reforms set out in the report.

Many of the recommendations can be implemented by changes to the NGR. Prompt submission of a rule change request to the AEMC is encouraged. This will enable the AEMC to consider these NGR amendments quickly, leveraging the consultation that has already taken place during this review. It will also allow the new rules to come into effect in time for many of the upcoming access arrangement review processes.

Other recommendations require changes be made to the NGL. The Commission has provided a description of the changes relevant to these recommendations to assist the COAG Energy Council's development of the relevant law changes and the timely introduction of improved dispute resolution arrangements for scheme pipelines.

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1 Introduction

1.1 Background

On 19 August 2016, the Council of Australian Governments (COAG) Energy Council published a gas market reform package in response to the 2016 reports into the east coast gas market by the Australian Competition & Consumer Commission (ACCC) and the Australian Energy Market Commission (AEMC or Commission).¹ Included in the reform package was the requirement for the AEMC to review Parts 8 to 12 of the National Gas Rules (NGR). Consequently, on 5 May 2017, the COAG Energy Council issued the AEMC with terms of reference for a review into the scope of economic regulation applied to covered pipelines.² The terms of reference request the AEMC to:

“make recommendations on any amendments it considers necessary to Part 8-12 of the NGR to address concerns that pipelines subject to full regulation are able to exercise market power to the detriment of economic efficiency and the long term interests of consumers.”

The terms of reference also specified that the review is to consider whether any changes should be made to the dispute resolution mechanism in Chapter 6 of the National Gas Law (NGL) and Part 12 of the NGR, to provide a more effective constraint on any exercise of market power by service providers. The AEMC was required to work closely with the Gas Market Reform Group (GMRG) in this regard.

Parts 8 to 12 of the NGR set out how scheme gas pipelines are regulated, as follows:³

- Part 8: Access arrangements
- Part 9: Price and revenue regulation
- Part 10: Other provisions of and concerning access arrangements
- Part 11: Facilitation of, and request for, access
- Part 12: Access disputes.

This review covers transmission and distribution pipelines that are subject to economic regulation by either the Australian Energy Regulator (AER) or Economic Regulation Authority of Western Australia (ERA).

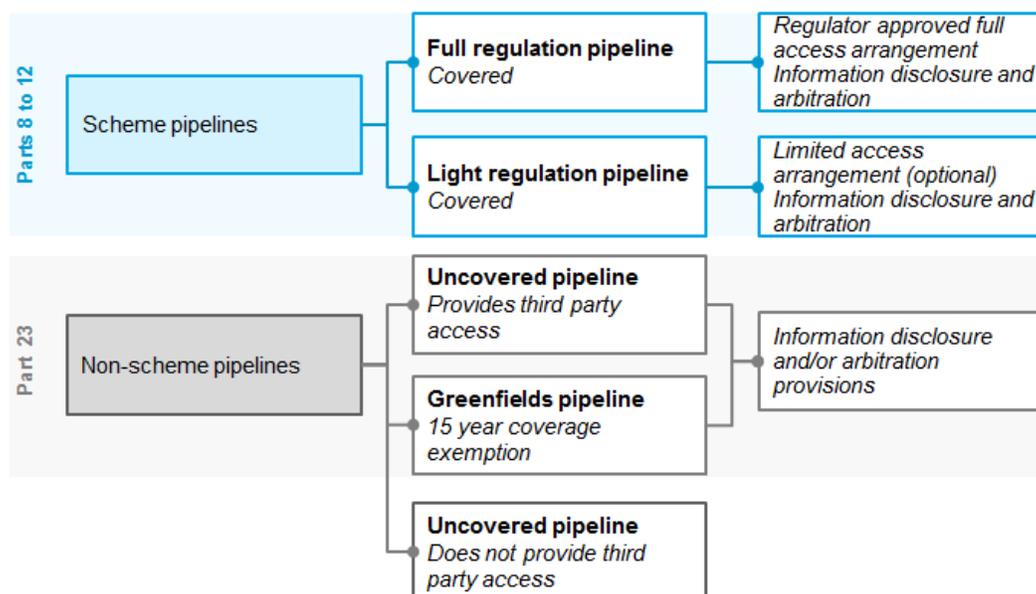
The scope of the review is summarised in the figure below.

¹ ACCC, *Inquiry into the east coast gas market*, April 2016; AEMC, *East coast wholesale gas markets and pipeline frameworks review, stage 2 final report*, May 2016.

² See Appendix F of this report.

³ A covered gas pipeline is a pipeline that is covered under the NGL and NGR. Covered pipelines and international pipelines are referred to as scheme pipelines. This review does not include consideration of the regulatory regime for international pipelines (of which there is currently zero).

Figure 1.1 Overview of pipeline classification



1.2 Stakeholder engagement

On 27 June 2017, the AEMC published an issues paper and received 20 submissions from stakeholders. These submissions are available from the AEMC website.

The AEMC also met more than 25 stakeholders including gas pipeline service providers, users and relevant jurisdictional policy bodies. It held regular meetings with the ACCC, AER, ERA and Gas Market Reform Group (GMRG).

Following this initial consultation on issues, the AEMC published an interim report on 31 October 2017. The interim report set out a summary of stakeholder views and identified the issues that were to be considered further in preparation of the draft report for the review. It also identified issues not to be considered further and the rationale for this position.

An all-day stakeholder meeting was held on 14 December 2017 to discuss possible solutions to key issues identified in the interim report. Further consultation with a number of stakeholders was also held in this period to aid in the preparation of the draft report.

A draft report was published on 27 February 2018. Eighteen submissions were received in response. A number of meetings with stakeholders including relevant government policy organisations, ACCC, AER, ERA, National Competition Council (NCC) and GMRG, were also conducted. The feedback provided by stakeholders throughout this period has greatly assisted the AEMC in the development of this final report and the accompanying draft amendments to the NGR and a description of the changes to the NGL.

1.3 This report

This final report sets out the Commission's assessment of issues related to the economic regulation of covered pipelines under the NGL and NGR. It includes the Commission's recommendations for NGL and/or NGR amendments to address these issues.

Chapter 2 of this final report provides an overview of the Commission's assessment and its recommendations. This is followed by a chapter on each area of interest included in this review:

- Chapter 3 – framework for pipeline regulation
- Chapter 4 – expansions and extensions
- Chapter 5 – reference services
- Chapter 6 – access arrangements
- Chapter 7 – determining efficient costs
- Chapter 8 – negotiation and information
- Chapter 9 – arbitration

These issue chapters are followed by Chapter 10 which sets out a plan for the implementation of the AEMC's recommendations. The report also includes:

- Appendix A – a summary of issues raised by stakeholders that are not included in the chapters
- Appendix B – an overview of related reforms
- Appendix C – description of the current regulatory framework
- Appendix D – options for reforming the regulatory framework
- Appendix E – a map of gas pipelines in Australia, noting their regulatory status
- Appendix F – terms of reference to this review.

In addition, accompanying this report is a set of proposed draft amendments to the NGR that reflect the recommendations in this report. This supporting document also includes a description of the NGL amendments that the AEMC considers are necessary to implement this report's recommendations.

1.4 Assessment criteria

In conducting this review, the Commission has aimed to determine how the current framework could be improved to better meet the national gas objective (NGO), which is to:⁴

“... promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas”

⁴ Section 23 of the NGL.

In preparing this final report, the Commission has assessed submissions and other relevant information on the potential changes to provisions governing the economic regulation of gas pipelines against the extent to which they are expected to better achieve the NGO.

In particular, consideration of the NGO raised the following questions relevant to the assessment of the economic regulation of gas pipelines:⁵

- Does the NGR provide for an efficient and effective regulatory framework that is consistent with the NGO?
 - Does the framework for the economic regulation of gas pipelines provide incentives that are in line with the purpose of the framework and deliver the policy objectives at least cost and in a timely manner?
- Does the NGR support efficient investment in gas transmission and distribution pipelines?
 - This includes considering the investment made in pipelines, expansions, extensions and new pipelines services.
- How do the requirements under the NGR affect the efficient operation and use of gas transmission and distribution pipelines?
 - For example, what is the impact on the utilisation and trading of pipeline capacity, expanding and extending pipelines and the development and use of performance indicators to better inform stakeholders.
- Does the NGR provide appropriate incentives to service providers to provide access to pipeline services for users?
 - Both upstream and downstream users should be considered in regard to the purpose and definition of reference services, implementation of the light regulation regime, information disclosure requirements, and the dispute resolution framework. The Commission has also had regard to the access regime for non-scheme pipelines as developed by the GMRG.
- Do the requirements under the NGR influence the tariff and non-tariff terms and conditions of access to pipeline services for the long term interests of gas consumers?
 - This includes considering the NGR provisions on cost allocation, determination of total revenue and reference tariffs for pipelines, the operation of tariff variation mechanisms, and the determination of appropriate non-tariff terms and conditions.

To assist in this assessment, the Commission has also considered each element of the regulatory framework in terms of best practice regulation, specifically, in relation to:⁶

⁵ AEMC, *Review into the scope of economic regulation applied to covered pipelines*, issues paper, 27 June 2017, pp. 13-15.

⁶ For further information see Department of the Prime Minister and Cabinet, *The Australian Government guide to regulation*, 2014.

- transparency – sufficient information should be available and relevant for users to negotiate access to a pipeline as well as to enable effective regulatory decision making
- proportionality – the context of the issue identified and the potential benefits that may result from changes to the regulation of pipelines should be assessed such that an appropriate balance between the costs and benefits of regulation can be found
- consistency and fit for purpose – while a regulatory framework should apply consistently, it should also accommodate differences in particular requirements where this is necessary and appropriate to do so
- adverse and unintended consequences – while regulation does have an impact on stakeholders, consideration should be had as to whether any adverse or unintended consequences arise
- resilience – immediate concerns raised by stakeholders have alerted the Commission to issues with the current regulation of gas pipelines, however, solutions to these issues should aim to be flexible and resilient to future market developments.

1.5 Next steps

Chapter 10 of this report sets out a plan for the implementation of the reforms recommended by the Commission. In brief, the Commission recommends:

- **Package 1** – An initial package of changes to the NGR be included in a rule change request that is submitted to the AEMC as soon as possible to enable prompt implementation of these changes in forthcoming access arrangement review processes.
- **Package 2** – The NGL amendments required to implement the identified reforms be developed and presented to the South Australian parliament. The process to make the recommended amendments to the NGL can be carried out concurrently with the package 1 rule change process. The changes to the NGL will enable a second set of rule changes to be proposed to the AEMC in a rule change request. Alternatively, these NGR amendments could be made by the South Australian Minister on the recommendation of the COAG Energy Council at the same time as, or shortly after, the NGL amendments.

While this review has focussed on the operation of Parts 8 to 12 of the NGR, stakeholders have also expressed concern with the tests and process for determining how pipelines are regulated under the NGL and NGR. As a result, the Commission has recommended that the COAG Energy Council request that it undertake a review on the governance and process by which the form of regulation applied to a pipeline is determined under the NGL and NGR so that it aligns with the NGO and is consistent with the COAG Energy Council's vision for the Australian gas market. While the Commission is conscious of the extent of reforms that are already occurring in the energy sector and the views from some gas pipeline service providers that this issue should not be considered further at this point in time, the Commission considers that the already scheduled review of Part 23 of the NGR in 2019 provides an ideal

opportunity to also consider this issue. Accordingly, the Commission recommends that it undertakes this review at the same time as (or as part of) the 2019 review of Part 23.

2 Overview

Australia's gas markets are in a period of significant change. Conventional gas reserves are declining while unconventional gas production is increasing. Linkages between gas and electricity are impacting the domestic energy market with wholesale gas prices influencing the gas consumption of gas fired generators and industrial users in particular. The natural gas export industry has more recently become the driver of supply and demand on the east coast. This has been the case in Western Australia for some years. Exports now represent approximately 68 per cent of total east coast demand for gas.⁷ In light of the changes in the Australian gas sector, the ability to efficiently transport gas from various sources to its many consumers is an important factor to making gas available across the economy at efficient prices.

Over the last two years the AEMC has recommended significant reforms to improve the wholesale gas commodity markets and the ability of users to trade unused capacity on pipelines. These include:

- the east coast wholesale gas market and pipeline framework review – the AEMC developed a set of reforms regarding:
 - the redevelopment of wholesale gas markets
 - secondary pipeline capacity markets, including a package of pipeline capacity trading reforms for which the implementation package has been prepared by the GMRG and is expected to be in place by 1 March 2019⁸
 - improvements to the provision of pipeline operation information through the Natural Gas Services Bulletin Board. One rule change has already been made; with further rule change requests expected after the requisite changes to the NGL are made.
- the review of the Victorian declared wholesale gas market – this review assessed the operation of the declared wholesale gas market (DWGM), particularly in relation to the incentives to invest in the transmission pipeline, and made recommendations for its redevelopment
- a rule change to implement a standard gas day start time across the east coast gas markets to support the development of secondary capacity trading across pipelines.

The COAG Energy Council, through the GMRG, has also improved the way in which users and prospective users of non-scheme pipelines can access pipeline services through the introduction of an access regime for non-scheme pipelines in Part 23 of the NGR.

As a result of these reforms, large and small users will benefit from the efficient movement of gas across the east coast in response to changing price signals in those markets and a greater insight into the availability of pipeline capacity. In addition, the

⁷ Oakley Greenwood, *Gas price trends review 2017*, January 2018, p. 16.

⁸ The implementation package includes amendments to Parts 15A, 18 and 22 of the NGR and the introduction of Parts 24, 25 and 26.

development of improved wholesale prices will support the creation of financial risk management tools.

The benefits to users from these recent reforms can be enhanced further with improvements to the economic regulation of covered pipelines. Previous reforms have made it easier to buy and sell gas in the wholesale markets. This review adds to the AEMC's gas reform package by making it easier and less costly to move that gas to where it is needed the most.

Accordingly, this review has focused on the economic regulation of the services provided by scheme pipelines (pipelines that are subject to full or light regulation under Parts 8 to 12 of the NGR). The purpose of this review has been to better support pipeline users to negotiate efficient and appropriate tariff and non-tariff terms and conditions for pipeline services or achieve these outcomes through arbitration if negotiations are unsuccessful.

Gas pipelines may be subject to economic regulation on the basis that these infrastructure assets display natural monopolistic characteristics which can provide their owners a degree of market power. Without effective regulation, the use of that market power could result in users paying more than the efficient cost-based tariff for services. Users may also face other terms and conditions for services that are onerous and do not reflect an efficient allocation of risk between the parties.

Applying economic regulation to such assets constrains the ability of service providers to exercise market power by charging tariffs that exceed efficient costs or by imposing unreasonable terms, while still providing incentives for efficient new investment in, and operation of, the pipeline.

For gas pipelines, there are three forms of economic regulation that may apply: full regulation, light regulation and the recently introduced access regime for non-scheme pipelines under Chapter 6A of the NGL and Part 23 of the NGR. Full regulation requires an access arrangement to be in place for that pipeline at all times. An access arrangement must be approved by the regulator (the AER or, in Western Australia, the ERA) on the basis of efficiency and other relevant criteria. A full access arrangement's defining feature is that it specifies certain pipeline services as reference services and sets corresponding reference tariffs. The purpose of determining reference services and reference tariffs is to not only directly constrains a service provider's ability to price monopolistically for that service, but to also provide a reference point for negotiating and arbitrating for access to other services.

Full regulation is the strongest of the available forms of regulation available under the NGL and NGR.

However, the ACCC recently concluded that "there is evidence that a large number of existing pipelines have been engaging in monopoly pricing".⁹ It also stated that "even if a pipeline is subject to full regulation, it may still be able to exercise market power".¹⁰

⁹ ACCC, *Inquiry into the east coast gas market*, April 2016, p. 9.

¹⁰ ACCC, *Inquiry into the east coast gas market*, April 2016, p. 11.

As a result, this AEMC review has focussed on improving the outcomes for pipeline users and gas consumers from the application of economic regulation to scheme (full and light regulation) pipelines.

2.1 Recommended reforms

As set out in this report, the regulatory framework applied to scheme pipelines is incentive-based, with an underlying reliance on the use of negotiation and arbitration. Pipeline service providers and prospective users negotiate the tariff and non-tariff terms and conditions for access to pipeline services provided by a scheme pipeline. These negotiations are informed by access arrangements for some pipelines and published pipeline information. Binding arbitration can be used when negotiations fail to result in an agreed outcome.

This framework has been constructed recognising the importance of contractual negotiations in the pipeline industry, specifically in relation to the provision of pipeline services. The ability for parties to negotiate provides the opportunity to minimise regulatory intervention and costs while allowing the parties to determine which services should be provided under the conditions that best suit them.

For these reasons, the negotiate-arbitrate concept is still appropriate for the regulation of gas pipelines and should remain the core foundation of the regulatory framework. This distinguishes it from the fundamentals of economic regulation applied to the large majority of services provided by electricity networks.

Nevertheless, the benefits of contractual negotiations must be balanced against the need to constrain the exercise of market power of pipeline service providers in these negotiations in order to protect the interests of users, prospective users and ultimately consumers of gas. The regulatory framework for pipelines achieves this balance by supporting negotiations between parties through the publication of information and access arrangements as well as providing arbitration (or the threat of arbitration) as a final option to resolve negotiations.

However, for a negotiate-arbitrate framework to successfully constrain the use of market power, all the individual components of the framework need to work together and function well in practice. This has been the focus of the Commission's work for this review.

Accordingly, the Commission has developed a package of significant changes to the economic regulatory framework for scheme pipelines that should be made in order to improve the operation of gas pipeline regulation and consequently, improve outcomes for pipeline users and gas consumers consistent with the NGO. In addition, improved efficiency in investment in pipelines, supported by a regulatory framework, is consistent with the COAG Energy Council's vision for the Australian gas market.¹¹

2.1.1 Assessment against the NGO

This section summarises the Commission's recommendations and explains how they will contribute to the achievement of the NGO.

¹¹ COAG Energy Council, *Australian gas market vision*, December 2014, p. 1.

Expansions and extensions

The Commission has considered concerns regarding the ability of service providers to use their market power when negotiating with users and prospective users for services provided by expansions and extensions to pipelines. These concerns arise because of an inappropriate different regulatory treatment of extensions and expansions to existing pipeline assets which may allow for the exercise of market power on these types of assets. As set out in Chapter 4, these concerns can be addressed by the inclusion of all existing and future pipeline expansions as part of the relevant covered pipeline. The Commission has also recommended that service providers be able to include existing pipeline extensions as part of the relevant covered pipeline.

These recommendations will support effective negotiations between service providers and users as well as bringing related pipeline assets under one regulatory framework, reducing the regulatory burden for some service providers. The changes will also enable regulators to make better informed decisions on allocation of costs and consequently, establish reference tariffs that reflect the cost of providing those reference services.

Reference services

Chapter 5 of this report recommends a new approach to determine which pipeline services should be specified as reference services in a full access arrangement. It responds to requests from many stakeholders that additional services should be specified as reference services so that the regulator sets the efficient tariff for each of those services to assist prospective users in their negotiations and aid the arbitration process. The new approach includes new criteria for reference services which enable the reference services specified in a full access arrangement to better reflect the variety of different services that have become more common of late due to recent changes in the dynamics of the east coast gas market (such as bi-directional services and park and loan services).

The new approach will also provide users with greater opportunity for engagement regarding the decision about which services are specified as reference services, as well as providing regulators with a specific framework to focus on this important question at an early stage of the access arrangement assessment process.

The Commission considers that the implementation of the reference service recommendations set out in Chapter 5 will support effective and informed decision making on pipeline and reference services without the creation of an additional significant regulatory burden. The expected identification of more reference services for pipelines will enable users and prospective users to be more informed in negotiating their use of pipeline services.

Access arrangements

A number of recommendations to improve the access arrangement assessment process are set out in Chapter 6 of this report. The Commission has recommended changes to:

- timeframes specified for the access arrangement assessment process
- the limited and no regulatory discretion framework
- use of regulator developed financial models.

The adjustments to timeframes will provide more time for stakeholder engagement. Decision making will also be improved by the removal of the current limitations on regulatory discretion that apply to certain elements of an access arrangement, clarifying that the regulator has the power to make decisions that best contribute to the NGO. In addition, the recommendation for service providers to use regulator developed financial models will enable stakeholders to more easily participate in this aspect of assessing an access arrangement proposal as well as supporting quicker and lower cost decision making by the regulator.

Chapter 6 also recommends making clear in the NGR that the regulator is to consider the allocation of risks when making a decision on an access arrangement proposal, in order to address the concerns that an undue amount of risk may be placed on pipeline users through the non-tariff terms and conditions for reference services. This recommendation also supports the making of decisions that are consistent with the efficient use of pipeline services that would be in the long term interests of consumers by assisting in the allocation of risks to the parties that can best manage them.

Two further clarifications are recommended in Chapter 6 to the operation of an access arrangement: first, on the operation of revenue caps; and second, on the operation of the interval of delay. If implemented, both these recommendations should improve stakeholder understanding of the operation of an access arrangement and provide greater clarity to the regulator when making a decision regarding these elements of an access arrangement.

Determining efficient costs

The recommendations set out in Chapter 7 of this report regarding new capital expenditure criteria, speculative capital expenditure, cost allocation and rebateable services aim to clarify the relevant NGR criteria to support the regulator in making decisions that promote the NGO on these elements of an access arrangement proposal. In particular, these decisions will impact on the calculation of reference tariffs which will in turn improve user decisions on their use of, and investment in, gas services.

Chapter 7 also includes a recommendation that the regulator set an initial capital valuation for pipelines that are subject to light regulation where such a valuation does not already exist. The determination of a capital base for such pipelines is intended to provide important information to pipeline users and prospective users that will aid them in negotiating for pipeline services. As gas pipelines are a capital intensive business, the value placed on the assets makes a significant impact on tariffs for pipeline services and consequently on users' decisions regarding those services.

Negotiation and information

The Commission has made a number of recommendations regarding the reporting of pipeline usage and financial information by service providers in Chapter 8. Each of the amendments recommended is intended to enable users and prospective users to make well informed decisions on the pipeline services that they may wish to use and the terms and conditions associated with those services. This is critical to the ability of users and prospective users to negotiate with service providers. It will in turn enable users and prospective users to make efficient decisions regarding their own business operational and investment requirements, which flow through to consumers of gas.

This is consistent with COAG Energy Council's vision for the Australian gas market – that parties are able to access relevant information to participate in the market. In addition, the publication of accurate and relevant information in a timely manner by service providers will enable well-informed regulatory and policy decisions to be made.

Arbitration

Several recommendations regarding the dispute resolution arrangements for scheme pipelines are included in Chapter 9 of this report. The focus of these recommendations is to create a more credible threat of arbitration to constrain the use of market power by service providers, and to improve outcomes where arbitration is required. This is to be achieved by clarifying the bases for making access determinations, improving the arbitration process and enhancing its transparency. A new fast-tracked arbitration process is also recommended to be available to users and prospective users under certain circumstances. It is anticipated that the amended dispute resolution framework will assist users and prospective users in achieving access to pipeline services that are provided on an efficient basis that is consistent with the NGO.

Framework for pipeline regulation

Related to these recommendations on the regulation of scheme pipelines is the question of how pipelines are able to move from one form of regulation (full, light or Part 23) to another as appropriate over time. The Commission acknowledges the COAG Energy Council's decision to implement an access regime for non-scheme pipelines has resulted in near universal regulation of gas pipelines across Australia. This is an important development in the regulation of gas pipelines.

Nevertheless, consideration should be given to what form of regulation is most appropriate, or fit for purpose, for a particular pipeline, balancing the relative direct and indirect costs of each form of regulation with the benefits they deliver in terms of constraining a service provider's use of market power. The Commission is also aware that as the market environment changes over time, what is an appropriate form of regulation at one point in time may not be at another. Consequently, there is value in not only providing different forms of regulation, but providing a workable decision making framework to allow the application of economic regulation to adapt to circumstances over time.

As a result, the Commission has considered the governance and process by which the form of regulation applied to a pipeline is determined. Specifically, it has found that the current order and construction of the tests which determine the form of regulation that applies to a pipeline is not consistent with good regulatory practice. This may result in an inappropriate form of regulation applying to a particular pipeline.

For these reasons, Chapter 3 of this final report includes a recommendation that the AEMC undertake a review (concurrent to, or as part of, the planned review into Part 23 of the NGR) with the purpose of determining how these issues could be resolved to achieve an overall regulatory framework that better achieves the NGO and is consistent with the COAG Energy Council's vision for the Australian gas market.

2.2 Implementation of reforms

The recommendations have been developed as a complete package of reforms that work together. Prompt implementation of the Commission's recommendations will enable the expected benefits to pipeline users to be realised sooner.

To assist in achieving this objective, the Commission has published a set of draft amendments to the NGR that reflect the recommendations that have been made in this report. In addition, recognising that implementation of some recommendations require changes to the NGL, a description of changes required to the NGL to implement the reforms has also been published to accompany this final report.

Furthermore, the Commission has set out a practical implementation plan for the recommendations in Chapter 10. The Commission anticipates that this information on drafting and the next steps will inform all stakeholders on how to best continue this reform process.

In brief, the Commission recommends the following steps be undertaken:

- **Package 1** - An initial package of changes to the NGR be included in a rule change request that is submitted to the AEMC as soon as possible to enable prompt implementation of these changes in forthcoming access arrangement review processes. This rule change request is able to include all the amendments to the NGR that are not dependent on prior NGL changes being made. These are the recommended amendments introducing a new reference service setting process, the treatment of pipeline extensions and expansions, amendments to the access arrangement process, determining efficient costs, and information reporting requirements. In addition, the rule change request should include the recommended transitional rule changes on the determination of an initial capital base for pipelines subject to light regulation and newly covered extensions and expansions.
- **Package 2** - The NGL amendments required to implement the identified reforms be developed and presented to the South Australian parliament. The process to make the recommended amendments to the NGL can be carried out concurrently with the package 1 rule change process. The changes to the NGL on dispute resolution and the treatment of extensions and expansions will enable a second set of NGR changes on these issues to be proposed to the AEMC in a rule change request. Alternatively, these NGR amendments may be made by the South Australian Minister on the recommendation of the COAG Energy Council at the same time as, or shortly after, the NGL amendments.

In addition, the Commission has recommended that the COAG Energy Council request that it undertake a review into the governance and processes by which the form of regulation applied to a pipeline is determined under the NGL and NGR so that it aligns with the NGO and is consistent with the COAG Energy Council's vision for the Australian gas market. This review should commence in 2019 concurrent to, or as part of, the scheduled review of Part 23 of the NGR.

Implementation of the final report's recommendations will also require the regulators to make scheme pipeline financial reporting guidelines and for AEMO to amend the Bulletin Board. Other guidelines that have been voluntarily prepared by the regulators

on access arrangements and arbitration should also be updated to reflect changes to the NGR and NGL.

In addition, where any new rules are recommended to be civil penalty or conduct provisions of the NGR, subsequent changes to the National Gas Regulations will be required.

2.3 Final recommendations

The recommendations made by the Commission are reproduced here. Discussion on each is included in the following chapters of this final report.

2.3.1 Framework for pipeline regulation (Chapter 3)

Recommendation 1: Review into the tests and forms of pipeline regulation

The COAG Energy Council should task the AEMC to carry out a review into the governance and processes of the framework for economic regulation of gas pipelines. This review is to consider the tests which determine which form of regulation should apply, the number and type of forms of regulation, and related institutional, governance and process arrangements. This review should be conducted concurrently with (or as part of) the planned review of the access regime for non-scheme pipelines, which is expected to commence in 2019.

2.3.2 Expansions and extensions (Chapter 4)

Recommendation 2: Include all expansions in an access arrangement

Amend the NGL and NGR such that:

- any future expansions of a covered pipeline be treated as part of the relevant covered pipeline and included in the access arrangement
- an existing expansion of a covered pipeline that is not included in the existing access arrangement must be included in the relevant access arrangement at the next access arrangement revision.

The proposed amendments are reflected in the drafting instructions of amendments to ss. 2 and 18 of the NGL, as well as draft changes to rule 104 and proposed transitional rules.

Recommendation 3: Remove the regulator's discretion to exclude an expansion from light regulation

Amend the NGL such that:

- the regulator's discretion to exclude an expansion from light regulation is removed
- expansions that have been excluded from a light regulation pipeline without a limited access arrangement become treated as part of that pipeline.

The proposed amendments are reflected in the drafting instructions of amendments to ss. 2 and 19 of the NGL.

Recommendation 4: Enable existing extensions to be included in access arrangements

Amend the NGR to permit a service provider to seek an existing extension to a scheme pipeline be included in the relevant access arrangement.

The proposed amendments are reflected in proposed transitional rules in the NGR.

2.3.3 Reference services (Chapter 5)

Recommendation 5: Clarify the requirements for describing pipeline services

Introduce a requirement to describe pipeline services in an access arrangement such that:

- a pipeline service is to be stated or identified in terms of parameters including type, location and priority (firmness of service), consistent with the provisions for the distinction between pipeline services under rule 549(3) of the NGR for non-scheme pipelines
- the service provider of a covered pipeline is to provide, as part of an access arrangement proposal, a full list of available pipeline services. This list of pipeline services can be referenced to existing gas transportation agreements for that pipeline.

The proposed amendments are reflected in the drafting of new rule 47A.

Recommendation 6: Clarify the requirements for describing a reference service

Specify that the reference service proposal must be drawn from the list of pipeline services and must be described having regard to the reference service factors.

The proposed amendments are reflected in the drafting of new rule 47A and the amendments to rule 48 and the proposed omission of rule 101.

Recommendation 7: Update the test for determining a reference service

Require the regulator to determine one or more pipeline services to be reference services, having regard to the following factors:

- actual and forecast demand for the pipeline service and the number of prospective users of the service
- the extent to which the service is substitutable with other pipeline services
- the feasibility of allocating costs to the pipeline service
- the usefulness of specifying the service as a reference service in supporting access negotiations and dispute resolution for other pipeline services, by providing a point of reference or benchmark for
 - negotiating access
 - tariffs
 - terms and conditions
- the likely regulatory cost for all parties in specifying the pipeline service as a reference service.

The proposed amendments are reflected in the drafting of new rule 47A, amendments to rule 48 and the proposed omission of rule 101.

Recommendation 8: Introduce a reference service proposal process and improve the access arrangement review process

Amend the NGR in order to:

- introduce a fit for purpose process to determine the reference services to be provided by the service provider with the following key design elements:
 - the service provider submits to the regulator its full list of pipeline services and proposed reference services, having regard to the reference service factors to be specified in the NGR (recommendation 7)

- in the event that the service provider fails to submit the list of pipeline services and reference service proposal by 11 months prior to the review submission date, the regulator will propose reference service(s) for that pipeline and commence consultation
 - in the event that the service provider submits a deficient list of pipeline services and reference service proposal, the regulator will set a date for resubmission of the reference proposal
 - the process for the making of the reference service proposal decision will be approximately six calendar months, with at least one round of consultation
 - the regulator's final decision on the reference services is guided by the reference service factors and must be reflected in the access arrangement, unless there is a material change in circumstances that necessitates a change, having regard to the reference service factors
 - in the event the regulator refuses to approve the service provider's reference service proposal, the regulator may make or revise a reference service proposal and make a final decision on that proposal
- enable service providers to set a review submission date and revision commencement date, with the approval of the regulator (rule 50 of the NGR)
 - remove the pre-submission conference (rule 57 of the NGR)
 - require the regulator to make a final decision on the access arrangement proposal within eight months of receipt of the proposal, with an absolute overall time limit of 10 months between the date that the service provider submits a full access arrangement proposal and the date that the regulator makes a final decision (rules 62(7) and 62(8) of the NGR).

The proposed amendments are reflected in the drafting of new rule 47A, the omission of rules 13 and 57 and the amendments to rules 50, 59 and 62.

2.3.4 Access arrangements (Chapter 6)

Recommendation 9: Develop financial models to be used by service providers

Allow the regulators to develop and publish financial models that are consistent with Part 9 of the NGR and revenue and pricing principles. If the models are developed and published, service providers will be required to use them to construct the capital base, and the total expected revenue from the building block approach as set out in Part 9 of the NGR.

These models must be developed (and in future, modified or replaced) and published in line with consultation procedures set out in new rule 75A.

The proposed amendments are reflected in the drafting of new rules 75A and 75B of the NGR.

Recommendation 10: Clarify the operation of revenue caps

Clarify that where the use of a variable revenue cap or a revenue yield control tariff variation mechanism is included in an access arrangement, the mechanism must also provide for any over or under recovery of the revenue cap or yield in the last year of one

access arrangement period to be included in the tariff variation mechanism in the following access arrangement period.

The proposed amendments are reflected in the drafting of amendments to rule 92 of the NGR.

Recommendation 11: Clarify that the regulator is to have regard to risk sharing arrangements

Clarify that the regulator is to have regard to the risk sharing arrangements implicit in the access arrangements when determining:

- the non-tariff terms and conditions
- the reference tariff variation mechanism.

The proposed amendments are reflected in the drafting of amendments to rules 97 and 100 of the NGR.

Recommendation 12: Extend the revision period

Extend the revision period from at least 15 business days to at least 30 business days.

The proposed amendments are reflected in the drafting of the amendment to rule 59 of the NGR.

Recommendation 13: Clarify the process for equalising revenue during the interval of delay

Clarify that:

- the process for equalising revenue during an interval of delay is to result in a service provider being no better or worse off as a result of the interval of delay
- the definition of the access arrangement period includes the period known as the interval of delay.

The proposed amendments are reflected in the drafting of amendments to the definition of access arrangement period in rule 3 and amendments to rule 92 of the NGR.

Recommendation 14: Remove the limited and no discretion regulatory framework

Remove the limited discretion and no discretion framework from the NGR.

The proposed amendments are reflected in the omission of rules 40 and 50(3) of the NGR (as well as amendments to rules 50, 79(6), 89(3), 91(2), 94(6) and 95(4) of the NGR).

2.3.5 Determining efficient costs (Chapter 7)

Recommendation 15: Provide guidance on the allowed return for speculative capital expenditure

Clarify that the rate of return to be applied to speculative capital expenditure is, at a minimum, the return implicit in the reference tariff but that this could be adjusted upwards if the regulator deemed it was appropriate having regard to the circumstances of the particular investment.

The Commission's recommendation is reflected in the draft amendments to rule 84 of the NGR.

Recommendation 16: Clarify the application of the new capital expenditure criteria

Insert the word “and” in rule 79 between subrules 79(1)(a) and 79(1)(b) to make it clear that regardless of which subrule (2) criteria are relevant for the purposes of subrule 79(1)(b), the expenditure in question must also meet the prudency criterion under rule 79(1)(a).

The Commission's recommendation is reflected in the draft amendments to rule 79 of the NGR.

Recommendation 17: Require an initial capital base valuation for light regulation pipelines

Amend the NGR such that:

- for those light regulation pipelines without an initial capital base, the regulator must calculate an initial capital base within six calendar months of the commencement of the amendments
- a light regulation pipeline service provider must comply with a request from the regulator for information required to calculate the initial capital base within twenty business days of the request
- an initial capital base determination will be carried out in accordance with provisions similar to the relevant provisions in rule 77 of the NGR
- the dispute resolution body, in a dispute regarding a light regulation pipeline, will apply the relevant initial capital base determination
- the roll forward of existing capital base valuation for subsequent dispute resolution proceedings will be carried out in accordance with provisions similar to the relevant provisions in rule 77 of the NGR.

This recommendation will be effected through an amendment to Part 7 of the NGR with the proposed addition of a new rule 35A.

Recommendation 18: Enable addition of existing extensions and expansions to the opening capital base

Apply the initial opening capital base determination methodology in rule 77(1) to:

- calculate the initial capital base that is associated with existing extensions and expansions
- roll the existing extensions and expansions forward in the capital base for the pipeline.

This recommendation will be effected through proposed transitional rules.

Recommendation 19: Require allocation of expenditure between covered and uncovered parts of a pipeline

Amend the NGR in order to:

- require an access arrangement revision proposal to include proposed forecast capital and operating expenditures that refer to costs after an allocation of expenditure between the covered and uncovered parts of a covered pipeline

- require a service provider to provide to the regulator details of the basis and methodology used to calculate the proposed forecast capital expenditure and operating expenditure and the allocation of the expenditure
- clarify the regulator's discretion in assessing the total expenditure and cost allocation.

The Commission's recommendation is reflected in the draft amendments to rules 79 and 91 of the NGR.

Recommendation 20: Amend the definition of rebateable services and rebate methodology

Amend the NGR to:

- enable the reduction of reference tariffs in accordance with rebateable service revenue through the reference tariff variation mechanism
- remove the requirement that rebateable services must be in a different market to reference services.

The Commission's recommendation is reflected in the draft amendments to rules 93 and 97 of the NGR.

2.3.6 Negotiation and information (Chapter 8)

Recommendation 21: Require transmission pipeline service providers to disclose augmented Bulletin Board information

Amend the NGR in order to:

- require all full and light regulation transmission pipelines to become Bulletin Board pipelines
- augment Bulletin Board reporting for transmission pipelines so that the outlook of uncontracted primary pipeline capacity for Bulletin Board pipelines is extended from 12 months to 36 months
- remove the requirement for scheme pipeline service providers to establish and maintain a public register of spare capacity.

The Commission's recommendation is reflected in the draft amendments to rules 141, 145 and 177, and omission of rule 111 of the NGR.

Recommendation 22: Require distribution pipeline service providers to disclose capacity and usage information

Require all full and light regulation distribution pipelines to publish capacity and usage information that is based on the information requirements applying to non-scheme pipelines, modified to be more suitable for distribution pipelines.

The Commission's recommendation is reflected in proposed new rules 35B, 36A to 36C in Part 7, and 112A to 112D in Part 11 of the NGR.

Recommendation 23: Clarify the role of the regulator in passing on information requests to service providers

Provide the regulator with the ability to decide whether or not to pass on all or part of an information request, subject to guidance.

The Commission's recommendation is reflected in the draft amendments to rule 107 of the NGR.

Recommendation 24: Introduce a financial and offer information disclosure regime for light regulation pipelines

Require light regulation pipeline service providers to publish a financial and offer information, based on the requirements that apply to non-scheme pipeline service providers but adjusted so that the reported capital base is calculated in a manner consistent with the method applying to full regulation pipelines.

The Commission's recommendation is reflected in the draft amendments to rule 36, and proposed new rules 35B, 36A, 36D to 36F in Part 11, of the NGR.

Recommendation 25: Remove the requirement to provide KPIs as part of the access arrangement information

Remove the requirements on service providers to include KPIs in the access arrangement information.

The Commission's recommendation is reflected in the draft amendments to rules 45 and 72 of the NGR.

Recommendation 26: Improve the Scheme Register

Amend the NGR such that:

- service providers for non-scheme pipelines be required to provide the AEMC with a description of the pipeline upon commencement of the relevant rule. Subsequently, both scheme and non-scheme pipeline service providers should be required to provide a description of the pipeline for inclusion in the register whenever a new pipeline is built or when it is affected by an extension or expansion
- the Scheme Register's contents be expanded to include published information about access determinations made under Division 4 of Part 23 of the NGR and exemption decisions made under Division 6 of Part 23 of the NGR
- the name Scheme Register be changed to Pipeline Register
- the current requirement for the Scheme Register to be made available for inspection at the AEMC's public offices during business hours be removed from the NGR.

The Commission's recommendation is reflected in the draft amendments to rules 133 to 135, and proposed new rule 135A in Part 14 of the NGR.

2.3.7 Arbitration (Chapter 9)

Recommendation 27: Clarify the negotiation process and the trigger for the dispute resolution process

Expand the negotiation process in the NGR, set out the steps that are to be followed by each party, and assign timeframes for each step:

- prospective user submits access request to service provider;
- service provider acknowledges receipt of access request within five business days of the prospective user submitting it;
- service provider informs prospective user within five business days of acknowledging receipt of the access request whether:
 - it can provide the service
 - it cannot provide the service, and the reasons why not
 - it requires an investigation in order to determine whether it can provide the service
- if the service provider can provide the service, it proposes terms and conditions within fifteen business days of notifying the prospective user that it can provide the service
- if the service provider requires an investigation, it provides the results of the investigation within fifteen business days of notifying the prospective user that it requires an investigation
- if the service provider finds that it can provide the requested service as a result of the investigation, it proposes terms and conditions within fifteen business days of notifying the prospective user that it can provide the service as a result of the investigation
- prospective user has to confirm acceptance of the service provider's terms and conditions within fifteen days of the proposal.

Either party can trigger a dispute at any point during the access negotiation process.

This recommendation will be effected through rule 112 of the NGR and s.181 of the NGL.

Recommendation 28: Clarify the role of the dispute resolution expert

Provide additional guidance on the role of the dispute resolution expert in providing advice on dispute resolution, energy industry, gas industry and matters relevant to the particular dispute:

- the expert must have knowledge and expertise that is relevant to the dispute
- the expert must not have any material direct or indirect interest or association that compromises, or is likely to compromise, the impartiality of the expert in relation to relevant disputes.

Set out the process for appointing the dispute resolution expert and using the evidence or reports that the expert provides as follows:

- the expert will be appointed on terms and conditions determined by the dispute resolution body
- the expert must report to the dispute resolution body
- the dispute resolution body must publish the expert's report.

The Commission's recommendation is reflected in the drafting instructions for the NGL.

Recommendation 29: Establish a reference framework for the dispute resolution body

Include a decision framework for dispute resolution on scheme pipelines that access determinations would be made with reference to. This framework would include the following:

- national gas objective
- revenue and pricing principles
- applicable access arrangement
- previous access arrangements
- previous access determinations
- pre-existing contractual rights
- applicable provisions from Part 9 to calculate total revenue and tariffs for light regulation pipelines (where applicable).

The Commission's recommendation is reflected in the drafting instructions for the NGL.

Recommendation 30: Introduce a fast-tracked dispute resolution process

Set out that a dispute could be resolved under a fast-tracked dispute resolution process if it meets one or more of a set of criteria that are assessed by the dispute resolution body:

- the pipeline that is subject of the dispute is a full regulation pipeline
- the service that is subject of the dispute is the same or similar to the reference service
- provision of the access request does not require an extension of the pipeline
- any other criteria that the dispute resolution body considers would enable it to carry out the dispute resolution under the fast-tracked process.

The fast-tracked dispute resolution process could be triggered by the party raising the dispute, if it is a pipeline user or prospective user, or by the dispute resolution body, and must be approved by both.

The timeframe for the fast-tracked dispute resolution process must be 50 business days, with stop the clock provisions. The dispute resolution framework under Chapter 6 of the NGL would set out the steps and timeframes for the fast-tracked dispute resolution process.

The Commission's recommendation is reflected in the drafting instructions for the NGL.

Recommendation 31: Publish dispute resolution commencement, outcome and information

Require the dispute resolution body to publish, as soon as practicable:

- a notice outlining parties to the dispute, and subject of the dispute
- the access determination and relevant financial calculations (if applicable, for example the capital base valuation)
- the information provided to the dispute resolution body during the course of the dispute.

The above should be subject to the confidentiality provisions under s. 329 of the NGL, such that information may be disclosed if:

- information disclosure should not be detrimental to the interests of the party that provided it
- in case information disclosure is detrimental, that the public benefit in disclosing the information outweighs that detriment.

The Commission's recommendation is reflected in the drafting instructions for the NGL.**Recommendation 32: Enable joint dispute resolution hearings**

Enable parties to request that the dispute resolution body join them to an existing dispute, as follows:

- within five business days of the publication of a dispute resolution notice, a party may request to join a dispute and state the reasons why
- the dispute resolution body may approve or refuse that party's request to be joined to the existing dispute, based on a set of factors that include:
 - there are one or more matters in common to the access disputes
 - hearing the access disputes together would be likely to result in the disputes being resolved in a more efficient and timely manner.

The Commission's recommendation is reflected in the drafting instructions for the NGL.

3 Framework for pipeline regulation

Box 3.1 Summary of findings and final recommendations

A variety of different forms of economic regulation (or no regulation at all) apply to different gas pipelines, depending on the circumstances. A series of tests are used to determine which form should apply.

Each of the forms of economic regulation are types of negotiate-arbitrate regulation. This is appropriate for gas pipelines as it balances the direct and indirect costs of regulation with effectively addressing the potential market power of gas transportation service providers.

Consistent with its terms of reference, this review has focused on Parts 8 to 12 of the NGR. Nevertheless, undertaking this review has revealed a number of issues with regard to the existing framework related to, but outside of, Parts 8 to 12 of the NGR.

Firstly, the process to decide the specific form of regulation applied to a pipeline is inappropriate. This could lead to under-regulation (insufficiently addressing the market failure) or over-regulation (and avoidable direct and indirect costs) – both of which ultimately result in higher prices for consumers of gas.

Secondly, two of the forms of regulation (light regulation and the access regime for non-scheme pipelines) are similar in overall concept but differ substantially in their specific design, potentially leading to unnecessary complexity. Furthermore, it is likely that the forms of regulation are not successively more intrusive, with the intent of more substantially addressing the market power of the service provider.

The Commission recommends a two-staged approach to addressing these issues.

Firstly, consistent with the scope of this review, the Commission recommends that light regulation should be improved and strengthened, including by replicating certain aspects of the access regime for non-scheme pipelines (Part 23 of the NGR). This will reduce the regime's complexity and make the different forms of regulation successively more intrusive. The Commission has provided draft rules to this effect, which it recommends be submitted as a rule change request as soon as possible.

Secondly, the Commission recommends that the COAG Energy Council request the AEMC undertake a review into the governance and processes of the framework for gas pipeline economic regulation in 2019, coincident with (or as part of) the scheduled review of the access regime for non-scheme pipelines.

The purpose of the review would be to determine whether the issues with the current regime identified as part of this review but outside of its scope are material enough to warrant changes to the forms of regulation and the tests for determining which form applies. If so, the review would determine the most appropriate changes to make to the regime.

Under the current economic regulatory regime for gas pipelines in Australia, different forms of economic regulation (or no economic regulation at all) apply to different pipelines depending on the circumstances. A number of tests assess the circumstances in question and determine whether regulation should apply, and if so which form. For the purposes of this report, the different forms of regulation, and the tests for determining which (if any) form is applied, are collectively described as the "framework" for pipeline regulation.

This chapter analyses, draws conclusions and makes recommendations regarding the framework for pipeline regulation:

- section 3.1 outlines the current and recently amended framework
- sections 3.2 to 3.5 analyse various aspects of the framework and makes conclusions and recommendations:
 - section 3.2 describes the negotiate-arbitrate regime which is used in all forms of economic regulation in the current regime, in comparison to other broad types of economic regulation
 - section 3.3 discusses how the recently changed framework addresses a previous issue that there could be the application of no economic regulation despite the market power of service providers
 - section 3.4 outlines how the existing tests which determine which form of regulation applies could risk over- or under-regulation of pipelines on a case-by-case basis, either way to the ultimate detriment of consumers
 - section 3.5 examines inconsistencies and overlaps between the different forms of regulation in the regime.

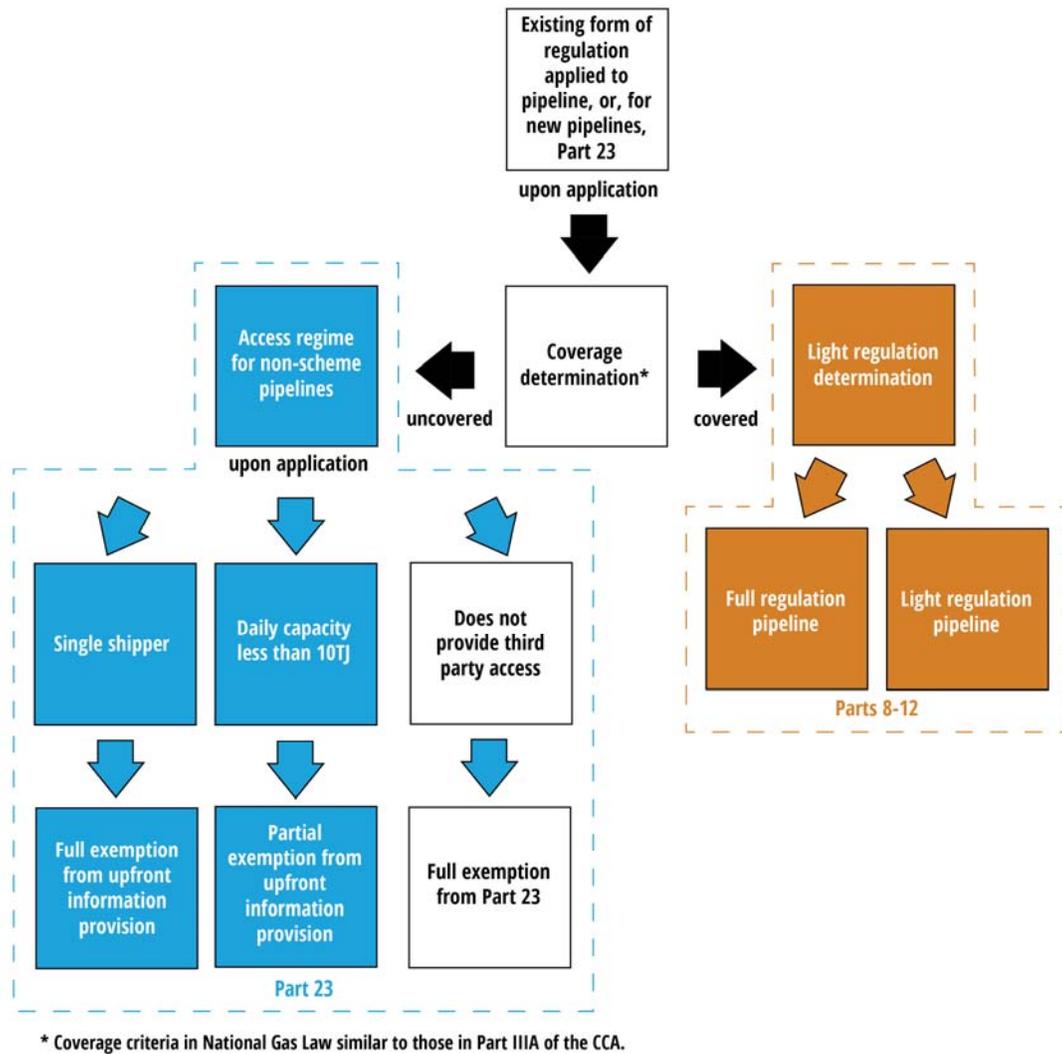
A more detailed discussion of the current and recent arrangements is provided in Appendix C.

Possible options for the reform of the framework are provided in Appendix D. These have been provided to inform the recommended review in 2019.

3.1 Overview of current and amended framework

This section provides a brief overview of the current and recently amended framework. The below discussion is not exhaustive and is focussed on issues pertinent to this chapter. It discussed the forms of regulation that can apply to gas pipelines (section 3.1.1) and the tests for determining which form of regulation applies (section 3.1.2). A more detailed discussion is provided in Appendix C, which largely replicates section 3.1 of the draft report. Figure 3.1 provides an overview of the current framework.

Figure 3.1 Overview of current framework



3.1.1 Forms of regulation

Currently, gas pipelines are subject to a variety of different forms of economic regulation (or no regulation at all), depending on the circumstances. These forms of regulation are:

- full regulation
- light regulation
- the access regime for non-scheme pipelines (Part 23 of the NGR and Chapter 6A of the NGL) and the various exemptions from some or all provisions of this regime.

Each of these forms of regulation are fundamentally a negotiate-arbitrate framework for third party access to the services provided by a pipeline. Prospective pipeline users and service providers negotiate access, based on information required to be provided by the service provider. If they are unable to agree to a mutually acceptable contract for access, prospective users can trigger binding arbitration.

The key distinguishing feature of full regulation is that the regulator (the AER or ERA) undertakes an assessment of, and subsequently approves, a full access arrangement or revisions to a full access arrangement. The access arrangement determines at least one reference service, and the corresponding reference tariff and non-tariff terms and conditions. Reference tariffs and reference services act as a direct constraint on a service provider's ability to price reference services monopolistically (or deliver a lower service standard). More importantly, however, within the negotiate-arbitrate framework, the primary rationale of reference services and reference tariffs is to inform negotiations between service providers and users, in reference to the access arrangement.

Light regulation and the access regime for non-scheme pipelines do not have full access arrangements and there are no pre-determined reference services or reference tariffs. While light regulation and the access regime for non-scheme pipelines have the same overarching features (negotiation, arbitration and information provision), they differ substantially in their detail.

3.1.2 Tests for determining which form of regulation applies

A series of tests are used to determine which form of regulation should apply to a pipeline. These tests have different criteria on which decisions are based, and different governance arrangements (for example, who administers the decisions and how the tests are invoked).

Coverage determination

An application for a coverage (or a revocation of coverage) determination can be made by any person to the National Competition Council (NCC). Once such an application is received, the NCC is required to assess the application and make a recommendation to the relevant Minister who makes the decision based on the NGO and coverage criteria.

The current coverage determination determines whether a pipeline is:

- covered, and so subject full or light regulation, or
- uncovered, and so subject to the access regime for non-scheme pipelines (noting that the regulator can exempt a pipeline from all regulatory economic requirements under Part 23 if it does not provide third party access).

This represents a change to the framework that existed prior to 1 August 2017, where an uncovered pipeline was not subject to any form of economic regulation (other than the threat of coverage).

The coverage criteria remain worded as they were prior to the introduction of Part 23 and are as follows:

- (a) that access (or increased access) to pipeline services provided by means of the pipeline would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the pipeline services provided by means of the pipeline
- (b) that it would be uneconomic for anyone to develop another pipeline to provide the pipeline services provided by means of the pipeline

- (c) that access (or increased access) to the pipeline services provided by means of the pipeline can be provided without undue risk to human health or safety
- (d) that access (or increased access) to the pipeline services provided by means of the pipeline would not be contrary to the public interest.

All four criteria must be met for coverage to apply.

Light regulation determination

A light regulation determination determines whether full or light regulation applies to a covered pipeline.

At the same time as the NCC makes a coverage recommendation to the relevant Minister, it must also decide whether to make a light regulation determination. In addition, the service provider of a covered pipeline can apply to the NCC for a light regulation determination under which the services provided by that covered pipeline are classified as light regulation services. Any person can apply to the NCC to revoke a light regulation determination.

A light regulation determination is made by the NCC (not the Minister on the advice of the NCC) depending on, among other factors:

- the effectiveness of the form of regulation to promote access
- the likely cost of the various forms of regulation
- consistency with the NGO
- the form of regulation factors, outlined in Appendix C
- any other matters it considers relevant.

Part 23 exemption framework

There is an exemption framework within Part 23 of the NGR which can be used to determine which specific provisions of Part 23 apply to a particular non-scheme pipeline. Exemptions for some or all of the provisions in Part 23 apply to small pipelines, single shipper pipelines and pipelines which do not provide third party access. Exemptions can be granted by the scheme administrator upon application.

Greenfields pipelines

Greenfields pipelines may be subject to the greenfields pipeline incentive framework. Greenfields pipelines that are yet to be commissioned can apply for a 15-year no-coverage determination in a similar manner to coverage determinations (discussed above). If granted, the no-coverage determination provides an exemption from coverage, and consequently light and full regulation, for 15 years. Pipelines that are granted such an exemption are subject to the access regime for non-scheme pipelines (under Part 23 of the NGR, subject to the exemption framework within that Part).

Additionally, a service provider of an international greenfields pipeline can apply to be exempt from price or revenue regulation. There has never been an international greenfields pipeline that has applied for or been granted an exemption from price or revenue regulation. Given this, and that there have been no issues raised or identified with regard to price or revenue regulation exemption regime, only very limited further discussion of it is provided in this report.

3.2 Negotiate-arbitrate regulation

3.2.1 Summary of draft report analysis and draft conclusions

In the draft report, the Commission noted that determining which form of economic regulation should apply is a trade off between:

- the direct and indirect cost of regulation
- the effectiveness at limiting the exercise of market power held by the service provider of a pipeline.

In consideration of this trade off, the Commission concluded that no change should be made away from the negotiate-arbitrate framework which applies in all forms of regulation and for both transmission and distribution pipelines.

3.2.2 Stakeholder submissions

In submissions throughout this review, a number of stakeholders supported the AEMC's position on the suitability of the negotiate-arbitrate regime for gas pipelines.¹² AGL agreed that commercial arrangements are best managed by negotiation between the service providers and users, noting these negotiations are often difficult because of the monopoly power of the service providers.¹³

However, PIAC argued that retailers have little incentive to effectively negotiate or arbitrate on behalf of their customers (end consumers), and that when they have negotiated lower access charges this has not been passed through to end consumers. PIAC noted that the lack of competition in the retail gas market exacerbates this issue.¹⁴ The MEU similarly argued that there is no imperative for retailers to minimise the cost of transportation, as costs are "passed through" to end consumers. The MEU further suggested that retailers seem disinterested in obtaining the lowest prices for access as demonstrated by their lack of engagement in consultations on access arrangements undertaken by the regulators.¹⁵

The EUAA argued that for the negotiate-arbitrate regime to be effective, there needs to be the appropriate level of information provided by the service provider, and an arbitration process which is not tilted unduly in favour of the service provider by virtue of their greater resources.¹⁶ Similarly, the MEU noted that in the experience of its members, negotiations had been ineffective, and that some prospective users have insufficient resources or knowledge of the negotiate-arbitrate process.¹⁷ Furthermore, MEU argued that in the experience of its members, the degree of countervailing market

¹² Submissions to the draft report: APA, p. 5; APGA, p. 4; NCC, p. 2; DBP and AGN, submission to the issues paper, p. 7.

¹³ AGL, submission to the draft report, p. 1.

¹⁴ PIAC, submission to the draft report, pp. 3-4.

¹⁵ MEU, submission to the draft report, pp. 11-12.

¹⁶ EUAA, submission to the draft report, pp. 6-7.

¹⁷ MEU, submission to the draft report, pp. 11-12.

power that they hold in negotiations is limited, meaning that the negotiate-arbitrate regime is not appropriate.¹⁸

The MEU also questioned whether there is much “negotiation” carried out for services other than the reference services, and hence whether a core benefit of the negotiate-arbitrate regime - the ability to negotiate bespoke services - is borne out in practice.¹⁹

ATCO noted that it is important for the regulatory regime to incentivise service providers (in its case a distribution pipeline) to innovate to deliver valued services to users.²⁰

3.2.3 Commission analysis

Rationale for economic regulation

Gas pipelines often exhibit substantial economies of scale and scope, and sunk costs. These characteristics can confer substantial market power on service providers, which, if exploited, can result in inefficient outcomes to the ultimate detriment of gas consumers. The underlying rationale for economic regulation is to provide incentives for efficient investment in and operation of the services while containing the monopoly pricing and inefficiencies that can arise from the exercise of market power.²¹

Relationship of market failure to form of regulation

As a general proposition, the greater the market power and the greater potential economic efficiency loss from its use, the greater the likelihood that more intrusive forms of regulation will improve overall outcomes. Conversely, where market power is less substantial, and so the lower the potential inefficiency loss, the stronger is the case for less intrusive forms of regulation (or no regulation at all). This is because regulation (and more intrusive regulation) results in direct costs (that is, the regulatory burden for regulators, service seekers, service providers and other interested parties) and indirect costs arising from regulatory error and resultant inefficiencies.

As noted above, each form of regulation in the current regime share in common that they are a negotiate-arbitrate form of regulation. Alternative regulatory regimes to negotiate-arbitrate include:²²

- more intrusive direct price or revenue control (as is in place for many electricity network services), where the regulator determines (typically ex ante) the maximum prices of services or the maximum revenue that can be derived from a collection of services²³

18 MEU, submission to the draft report, p. 11.

19 *ibid.*, p. 12.

20 ATCO, submission to draft report, p. 2.

21 Expert panel on energy access pricing, report to the Ministerial Council on Energy, April 2006, pp. 10-11, 41.

22 *ibid.*, April 2006, p. 44.

23 Note that the de facto effect of reference tariffs for reference services for pipelines subject to full regulation is the imposition of direct price controls on these specific services.

- less intrusive price monitoring, where the regulator monitors and typically reports prices and/or service standards either periodically or after a change in prices or service standards arises. This may be accompanied by the threat of more intrusive regulation should market power be misused, to place a discipline on prices.

Negotiate-arbitrate regime represents an appropriate balance

Compared to direct price or revenue control regulation, the Commission considers that the primary benefits of a negotiate-arbitrate framework include:

- Users and prospective users (producers, retailers and industrial consumers) are at the heart of the regulatory process. Users and prospective users are able to negotiate specific, bespoke services that suit their business models, needs and risk appetites, as opposed to the services on offer being determined through a regulatory process.²⁴
- Pipeline service providers are able to adapt flexibly to changing user preferences, prospective new users, and developments in natural gas markets.
- The framework reduces the regulatory burden, particularly in the case of light regulation and pipelines subject to regulation under Part 23 of the NGR. In these cases, the regulation is "reactive" rather than "proactive" in that much of the direct regulatory costs are only incurred if and when a matter is taken to arbitration. For full regulation pipelines, only reference services and reference tariffs are determined by the regulator, as opposed to a full suite of services and tariffs.²⁵

Consistent with its findings in the draft report, the Commission considers that the benefits of a negotiate-arbitrate framework are particularly pertinent in the gas industry (compared to, for example, direct price or revenue controls applied to much of the electricity industry). Pipeline users and prospective users (producers, retailers and those industrial consumers that directly procure access from service providers) are relatively few in number. Some are relatively well resourced and well informed with regard to the negotiation process. Some may have a degree of countervailing market power, although the Commission recognises that this may not always be the case. These factors serve to constrain the extent of market power of pipeline service providers²⁶ - although only to a degree - if these factors completely constrained market power in all cases there would be no need for economic regulation at all.

The Commission further considers that the imposition of a "lighter" overall form of regulation (such as price monitoring and reporting) would be unlikely to be appropriate as it would be unlikely to provide a sufficient constraint on the use of market power by service providers or provide sufficient assistance in negotiations.

²⁴ Users and prospective users of pipelines can also be referred to as shippers. These parties deal directly with pipeline service providers in order to ship gas through a pipeline. Small gas users are customers of retailers.

²⁵ This reduction in regulatory costs should be netted against the cost of the negotiation process, which is borne by the counterparties.

²⁶ Expert panel on energy access pricing, report to the Ministerial Council on Energy, April 2006, p. 45.

In the case of gas pipeline services, the negotiate-arbitrate regime therefore represents an appropriate balance between the direct and indirect cost of regulation on the one hand and the ability for the regulation to constrain market power on the other.

Box 3.2 A comparison of gas and electricity regulation

The negotiate-arbitrate framework used for gas pipeline services differs substantially from the framework in place for the regulation of the large majority of electricity network services. The majority of electricity network services are classified as standard control services (distribution) or prescribed transmission services (transmission), while only small number of services are classified otherwise, including as negotiated distribution and negotiated transmission services.

For the majority of electricity services, direct price or revenue control is applied: the regulatory process determines, *ex ante*, both the specific services that are regulated and the prices of the services or the total revenue to be derived from the provision of those services. For the majority of services, distribution network service providers deliver services to consumers as well as retailers under tripartite arrangements. Hence, there are not just a small number of relatively well-informed and resourced counterparties to negotiate with a network service provider.

The Commission recognises stakeholders' concerns that negotiate-arbitrate regulation has limitations where information asymmetry is substantial and there are high transaction costs involved in negotiation and arbitration. For these reasons, the Commission recommends significant improvements to these aspects of the regime, as discussed in Chapters 5 (improved reference services on which to base a negotiation), 8 (information provision by covered pipelines) and 9 (arbitration regime). On balance, the Commission considers that with these improvements, the negotiate-arbitrate regime remains the appropriate form of regulation for gas pipelines for the reasons provided above and is consistent with achieving the NGO.

Distribution pipelines

The Commission continues to consider that the option for users (such as retailers or large consumers) of distribution pipelines to negotiate (often on the basis of a regulator-approved access arrangement) is an important feature. It provides flexibility to accommodate the needs of prospective users and changing needs of existing users that are not fully accommodated by the access arrangement. This may be most relevant for larger industrial and commercial gas users.

The Commission recognises that for many gas distribution services, the benefit of being able to negotiate specific, bespoke services is positive but more limited than for gas transmission services. However, for the majority of distribution pipelines that are subject to full regulation, even in those cases where all prospective users choose not to negotiate a different service and instead contract for the reference service, the regime becomes a *de facto* price cap regime, with the reference tariffs acting as the price caps. The Commission has not been presented evidence to suggest that this outcome is inappropriate.

Therefore, the Commission's final assessment is that in the case of distribution pipelines:

- There are likely to still be some benefits of the negotiate-arbitrate regime for distribution pipelines by providing the option for users to negotiate a different service (even if this option might only be rarely taken up). In contrast, the imposition of direct price or revenue controls would require the regulator to determine the nature of the services required by users. Users and prospective users would have limited or no ability to negotiate an alternative service.
- In the case of distribution pipelines subject to full regulation, if one, many or all prospective users choose not to negotiate and instead purchase the reference services, the regime functions adequately as a de facto price cap regime for those users, while still allowing other users to negotiate alternative services, should they wish to.
- While the prospect of users negotiating services other than a reference service may be relatively limited currently on distribution pipelines, there is the possibility that in the future a greater variety of services are sought by prospective users (as has become the case for transmission pipelines).
- There would be significant one-off and ongoing costs associated with changing the framework and introducing different regulatory regimes for distribution and transmission pipelines. While the model of regulation for electricity distribution may serve as a starting point for developing a separate regime for gas distribution, it is unlikely that it can be seamlessly applied without substantial revision.
- As with the imposition of price or revenue controls on transmission pipelines, there are likely to be greater direct and indirect regulatory costs associated with this approach, particularly in the case where light regulation or regulation under Part 23 applies.

Nevertheless, the Commission recognises that for the negotiate-arbitrate regime to be effective for distribution pipelines, the appropriate form of regulation (full, light or regulation under Part 23) should apply for each particular pipeline. Without this, there is a risk of under-regulation (and market power being insufficiently addressed) or over-regulation (leading to high direct and indirect costs). This is discussed in general in section 3.4.

Effect of retail competition

It is beyond the scope of this review to consider the extent to which retail gas markets are workably competitive in Australia. However, even in uncompetitive markets, it would be a profit maximising strategy for retailers to seek as low a price as possible for access (being no different from any other cost of running their businesses).

3.2.4 Conclusion

For the reasons set out above, and consistent with its findings in the draft report, the Commission does not recommend any changes away from the negotiate-arbitrate framework which applies in all forms of regulation and for both transmission and

distribution pipelines. It provides the appropriate balance between the direct and indirect cost of regulation and the ability for regulation to constrain market power.

3.3 Near universal regulation addresses concerns of previous regime

3.3.1 Summary of draft report analysis and draft conclusions

In the draft report, the Commission concluded that the introduction of the access regime for non-scheme pipelines (Chapter 6A of the NGL and Part 23 of the NGR) appears to have addressed a problem with the framework as it was: that the market failure of monopoly pricing, as distinct from denial of access, was not considered as part of the coverage determination when determining whether to regulate a pipeline.

The result of the introduction of the access regime for non-scheme pipelines is that most pipelines are subject to some form of economic regulation – either full or light if covered, or under Part 23 if uncovered.

3.3.2 Stakeholder submissions

Only a limited number of stakeholders commented on this topic as distinct from the risk in the current framework of applying the wrong form of regulation (section 3.4) or the inconsistencies and overlap between forms of regulation (section 3.5).

A number of parties agreed that the current framework means that there is near universal regulation of pipelines with three different forms of regulation.²⁷ The NCC noted that there is now an assumption that market power exists for pipelines subject to Part 23, effectively bypassing the coverage determination.²⁸

The AER noted, consistent with the AEMC's findings, that Part 23 contrasts with the historical architecture for pipeline regulation, which was largely focused on addressing denial of access by vertically integrated firms.²⁹

The NCC did not concur with the AEMC's analysis that prior to the introduction of Part 23 the regime had the problem that the coverage criteria failed to address the issue of monopoly pricing. In its view:³⁰

“[t]he coverage criteria (a) and (b) were designed to consider and test for market power, a threshold trigger for whether coverage (regulation) should be applied.”

and

“Persistent monopoly pricing is [a] sign of significant barriers to entry, and/or enduring market power. Consideration of such issues is already included in criterion (a), as is consideration of whether the service provider has the ability and incentive to use that market power to adversely affect competition in a dependent market.”

²⁷ Submissions to the draft report: ACCC, p. 8; AER, p. 4; NCC, p. 5.

²⁸ NCC, submission to the draft report, p. 5.

²⁹ AER, submission to the draft report, p. 4.

³⁰ NCC, submission to the draft report, pp. 3, 6.

That is to say, the NCC considered that criteria (a) and (b) of the coverage determination already captures the concepts of monopoly pricing, and that instances of enduring monopoly pricing will necessarily manifest themselves in a decrease in competition in related market. As such, it considered that the coverage criteria are fit for purpose for addressing both the market failures of monopoly pricing and denial of access.³¹

APA cautioned against the AEMC basing its assessment on the analysis within the ACCC's 2016 Inquiry³² or Dr Vertigan's examination,³³ which it considered to be flawed.³⁴ The NCC was also concerned that the monopoly pricing behaviour observed by the ACCC in its east coast gas inquiry report (to the extent that it was occurring) could be transitory.³⁵

3.3.3 Commission analysis

In 2016, the ACCC identified a shortcoming in the framework that was in place prior to the introduction of the access regime for non-scheme pipelines: the coverage determination process was primarily designed to test the market failure of denial of access and not monopoly pricing.³⁶

Depending on the interpretation of the coverage criteria, to the extent that monopoly pricing existed on a pipeline but not denial of access, then the pipeline may not be covered by regulation, despite the inefficiencies that arise from monopoly pricing.³⁷ The ACCC found that monopoly pricing was pervasive on transmission pipelines, unconstrained by competitive forces or economic regulation, with detrimental effects on economic efficiency and the long term interest of consumers.³⁸ Consequently, the ACCC recommended that the coverage criteria be changed so that it directly assessed the issue of monopoly pricing.

31 NCC, submission to the draft report, pp. 6-7.

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

33 Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, December 2016.

34 APA, submission to the draft report, pp. 10-11.

35 NCC, submission to the draft report, p.7.

36 ACCC, *Inquiry into the east coast gas market*, April 2016, pp. 129-130.

37 See Box 3.3 for further details.

38 ACCC, *Inquiry into the east coast gas market*, April 2016, pp. 8-12, 121. The ACCC inquiry focussed on transmission pipelines and not distribution pipelines. *ibid.*, p. 92, footnote 96.

Box 3.3 Denial of access and monopoly pricing

The physical characteristics of gas pipelines means that they exhibit natural monopoly characteristics which can confer market power on persons who own, operate and control gas pipelines (pipeline service providers). This market power can be exploited in a number of ways, including:

- **monopoly pricing** – where a pipeline service provider, unconstrained by competition, increases prices (or reduces service standards for any given price) to maximise its profits. In turn, this creates the potential for inefficient utilisation of the infrastructure. While this may reduce competition in related markets, this is not necessarily the case, and is not the intent of the service provider.
- **denial of access** – where a pipeline service provider denies access to otherwise spare capacity and so gains a competitive advantage in a market upstream or downstream to the infrastructure. It may deny access either by completely refusing to sell access at any price or on any terms, or providing it at a price or level of service which squeezes the profit margins of an access seeking competitor in a related market. While denying access is not profit maximising for a firm within the infrastructure segment of the supply chain (access to the infrastructure could otherwise be sold at the price which profit maximises in that part of the supply chain – as in the case of monopoly pricing), it may be profit maximising for a firm that operates upstream and/or downstream of the infrastructure. This is due to the competitive advantage it derives across the supply chain from limiting pipeline capacity to its potential upstream or downstream competitors, or squeezing their profit margins. Such behaviour can result in inefficient utilisation of the infrastructure. Additionally, and importantly for the purposes of this discussion, this behaviour reduces economic efficiency by conferring market power in related markets to the pipeline service provider, reducing competition in those markets. Indeed, this is the intent of the pipeline service provider.

Criterion (a) of the coverage determination assesses the impact of competition in related markets - and hence is focused on the issue of denial of access. Monopoly pricing may have no material impact on competition in related markets but could still result in inefficiencies.

Denial of access typically arises in vertically integrated industries – where firms have interests in both the infrastructure and one or more related parts of the supply chain. In contrast, monopoly pricing may arise in any natural monopoly infrastructure:

- a vertically dis-integrated firm (usually) only has interests in the infrastructure segment of the supply chain, meaning that raising prices to profit maximise within that segment is profit maximising for the firm as a whole, although

- a vertically integrated firm would seek to maximise profits across the value chain, weighing up whether the monopoly profits to be made from providing access at monopoly prices are greater or less than the profits to be made from denying access and improving its competitive position in related markets.

Given that gas pipelines in Australia are typically vertically dis-integrated (that is, their owners, operators or controllers are usually not also gas producers, retailers or consumers), the more likely market failure to occur in the pipeline sector is monopoly pricing. As noted above, monopoly pricing may not result in a reduction in competition in related markets, and hence pipelines undertaking monopoly pricing may not be covered, despite the inefficiencies that may arise as a result.³⁹

As part of its review of east coast gas markets and pipeline frameworks the AEMC concurred with the ACCC's view that there appeared to be a problem with the coverage criteria.⁴⁰ The AEMC maintains this position. It does not consider that all instances of enduring monopoly pricing for access to pipelines will necessarily manifest themselves in a reduction in competition in related markets. As such, there is a prospect that pipelines that engage in enduring monopoly pricing will not meet coverage criterion (a), despite the prospect of economic inefficiency that results from the monopoly pricing.

The Commission's overarching objective under the NGO is economic efficiency and the long term interest of gas consumers.⁴¹ In this respect the NGO differs from the objective of the national access regime (on which the gas access regime was originally modelled, and which the NCC has a role in applying in other industries). The objective of the national access regime is partially reproduced below:⁴²

"The objects of this Part are to: ... promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets."

Under the NGO, the Commission is concerned with both denial of access and monopoly pricing issues, as either of those will be contrary to the efficient investment in, and operation and use of, gas services for the long term interests of gas consumers. However, in certain circumstances, the coverage criteria may only be satisfied by a denial of access and not by monopoly pricing, as monopoly pricing may not lead to any impact on competition in upstream or downstream markets (for example, where the user competes in a global market and/or where gas pipeline charges are only a small proportion of users' total input costs).

³⁹ For a more detailed discussion see ACCC, *Inquiry into the east coast gas market*, 2016, Chapter 6; Incenta Economic Consulting, *Assessment of the coverage criteria for the gas pipeline access regime*, September 2015 (available from AEMC website).

⁴⁰ AEMC, *East coast wholesale gas markets and pipeline frameworks review*, stage 2 final report, p. 112.

⁴¹ See: AEMC, *Applying the energy objectives, a guide for stakeholders*, 1 December 2016.

⁴² Competition and Consumer Act (2010), s. 44aa.

As a consequence of the ACCC's findings of both a problem in theory and in practice, Dr Vertigan was engaged by the COAG Energy Council to undertake an examination of the test for the regulation of gas pipelines. Dr Vertigan agreed that while the market failure of denial of access is not a significant issue, it is clear that gas pipelines have natural monopoly characteristics creating a high barrier to entry for prospective competitors, in turn translating to market power, monopoly pricing and the prospect of inefficient outcomes.⁴³

In order to address the issues identified by the ACCC, Dr Vertigan recommended that the coverage test be retained in its current form, but instead that:⁴⁴

- the disclosure and transparency of pipeline service pricing and contract terms and conditions be enhanced, including requiring the provision of information on the full range of pipeline services which are available or sought
- a framework for binding arbitration, available to all open access pipelines in the event parties are unable to reach a commercial agreement, be introduced into the NGL
- the appropriateness of amending the coverage test should be reviewed within five years after the arbitration framework is operational.

Dr Vertigan considered this was appropriate because compared to a change to the coverage criteria (which may result in more pipelines subject to full or light regulation), the proposed information and arbitration regime would, in his view, reduce the regulatory burden, avoid the time, cost and uncertainty associated with the existing regulatory processes and avoid any 'chilling' effect on investment.⁴⁵

In December 2016 the COAG Energy Council agreed to Dr Vertigan's recommendations, but in implementing the necessary changes to the NGL made a number of amendments to Dr Vertigan's recommendations which are pertinent to this discussion:⁴⁶

- Dr Vertigan recommended the new information disclosure and binding arbitration regime be imposed on all open access pipelines. However, Chapter 6A of the NGL which enables the recommendations only applies to non-scheme pipelines. Non-scheme pipelines are defined through the introduction of Chapter 6A as pipelines which are neither covered pipelines (including those greenfields pipelines which have the benefit of a 15-year no-coverage determination) nor an international pipeline to which a price regulation exemption applies.
- The COAG Energy Council intends to undertake a review of the access regime for non-scheme pipelines in 2019. The Commission understands from discussions with staff from the Commonwealth department of environment and energy that the exact scope, timing and governance of that review are yet to be determined.

⁴³ Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, December 2016, pp. 9-13.

⁴⁴ Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, December 2016, pp. 14-16.

⁴⁵ Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, December 2016, p. 16.

⁴⁶ *National Gas (South Australia) (Pipelines Access – Arbitration) Amendment Act 2017*.

3.3.4 Conclusions

Consistent with the draft report, the Commission concludes that the introduction of the access regime for non-scheme pipelines (Chapter 6A of the NGL and Part 23 of the NGR) appears to have addressed a problem with the framework as it was: the market failure of monopoly pricing, as distinct from denial of access, was not considered when determining whether to regulate a pipeline. The result of the introduction of the access regime for non-scheme pipelines is that most pipelines are subject to some form of economic regulation – either full or light if covered, or under Part 23 if uncovered.

The only pipelines which are not subject to any economic regulation are those that do not deny access (and hence do not meet the coverage criteria) and also do not provide third party access and so by definition do not engage in monopoly pricing. Indeed, the GMRG's rationale for why an exemption to Part 23 is available for pipelines that do not provide third party access is that the coverage determination process is the appropriate path to test whether regulation should apply to these pipelines.⁴⁷ The Commission considers that this rationale is correct and that pipelines which do not provide third party access (and so cannot be monopoly pricing) and which have not been found to be denying access should not be subject to economic regulation.

3.4 Risk of wrong form of regulation applying to pipelines

3.4.1 Summary of draft report analysis and draft conclusions

In the draft report, the Commission noted that consistent with the decision about which broad genre of regulation should apply, which specific form of regulation should apply within the range of negotiate-arbitrate models also should also be a function of the extent of market power that can be exercised by the pipeline service provider and the direct and indirect cost of each form of regulation. The Commission noted that not all of the current tests which determine which form of regulation applies expressly consider this trade-off. As a result, there is the possibility that an inappropriate form of regulation may be applied to some pipelines.

It was acknowledged that consideration of this issue is somewhat speculative. Nevertheless, there is the prospect, at least in theory, of the wrong form of regulation applying on a case-by-case basis. Furthermore, the introduction of Part 23 may have increased the hurdle for attaining full regulation, depending on the interpretation of the coverage criteria contained within the coverage determination process.

In order to address this potential issue, the draft report included an option for stakeholder consideration and feedback. The option involved re-ordering the tests which determine which form of regulation applies.

The Commission noted that the existing regime has only been recently amended with the introduction of Part 23 of the NGR, and so the materiality of the issue described above in practice was not yet clear. It also noted the potential for significant cost and time to enact any reforms in this area. For these reasons, the Commission sought feedback from stakeholders on these matters and whether the intended review of the

⁴⁷ GMRG, *Gas pipeline information disclosure and arbitration framework*, final design recommendations, June 2017 p. 52.

access regime for non-scheme pipelines in 2019 may be the appropriate avenue to consider them further.

3.4.2 Stakeholder submissions

There was considerable feedback on this topic from stakeholders. Views ranged significantly, including with regard to the nature, extent and existence of the problem, and the appropriate solution and next steps.

A large number of stakeholders that commented on this matter, including all consumers representatives, most market institutions and EnergyAustralia concurred that there is a problem with the existing framework for the reasons provided in the draft report.⁴⁸ EnergyAustralia noted that a detailed assessment of the impact of the introduction of Part 23 of the NGR on the potential for deregulation of covered pipelines appears not to have been a focus of Dr Vertigan's examination.⁴⁹

However, these stakeholders differed on the appropriate solution or next steps to be taken to redress this issue:

- PIAC recommended that the AEMC recommend either a change to the coverage criteria as proposed by the ACCC in its 2016 inquiry, or adopting the option laid out in the AEMC's draft report. It argued that not adopting either of these reforms because Part 23 has only been recently introduced, or because of the length and scale of the changes required are large, were invalid arguments for retaining the status quo given that it is leading to outcomes inconsistent with the NGO.⁵⁰
- The MEU was concerned that the Commission did not make draft recommendations to change the coverage criteria consistent with the ACCC's recommendations in its 2016 inquiry.⁵¹
- EnergyAustralia suggested that the Commission further examine this issue during this review. It noted that regulatory reforms should be undertaken to avoid known issues before they become material in practice, rather than waiting for a material problem to eventuate before changes are made.⁵²
- The EUAA suggested that in order to avoid delaying other recommendations from this review, the AEMC should set out a process by which it will review the coverage determination process as soon as possible after the conclusion of this review. The complexity and importance of this issue means that starting this work should not be delayed until 2019, but should instead feed into the scheduled 2019 review of the access regime for non-scheme pipelines. The EUAA supported a change to the coverage criteria to that recommended by the ACCC in its 2016 inquiry.⁵³

48 Submissions to the draft report: EnergyAustralia, pp. 1-2; EUAA, p. 2; AER, p. 3; ACCC, p. 3; MEU, p. 7; PIAC, p. 5.

49 EnergyAustralia, submission to the draft report, pp. 1-2.

50 PIAC, submission to the draft report, p. 6.

51 MEU, submission to the draft report, p. 7.

52 EnergyAustralia, submission to the draft report, pp. 1-2.

53 EUAA, submission to the draft report, p. 2.

- The AER recommended a separate review to consider this issue in addition to the planned review of the access regime for non-scheme pipelines. That review could be undertaken at the time of the COAG Energy Council review of the access regime for non-scheme pipelines in 2019, or at another suitable time.⁵⁴
- Given the recent introduction of the access regime for non-scheme pipelines, the ACCC did not think this is a material issue at this stage. It suggested that given the complexity and importance of the issue, and that it has not been fully explored with stakeholders, it would be more appropriate to address the tests for determining which form of regulation applies as part of the review of the access regime for non-scheme pipelines in 2019.⁵⁵

Additional points noted by stakeholders suggesting there is a problem with the existing framework were:

- PIAC suggested that the NCC's stakeholder engagement practices for coverage and light regulation determinations were insufficient and that the AEMC should recommend that they are improved. Changes to the form of regulation applied should not be made absent of proper stakeholder engagement, and could have resulted in the wrong form of regulation applying.⁵⁶
- The MEU commented that seeking coverage and/or seeking arbitration under Part 23 both impose considerable costs. These costs limit the ability of most consumers (especially small consumers) to be able to use the new tools provided by the AEMC's draft recommendations or through using Part 23. The process is also too "clunky", and should instead allow for quicker and smoother changes between forms of regulation as market conditions change.⁵⁷

All pipeline service providers who commented on this issue and their representative organisations, Origin, and the NCC suggested that reconsidering the coverage criteria, determination process or related issues is premature, unnecessary and/or disruptive. Points raised were:

- There is a lack of information or evidence of a problem which would justify a further review (for example, there have not been multiple failed coverage applications under the NGL).⁵⁸
- Findings of monopoly power by the ACCC and Dr Vertigan were poorly evidenced, lacking in economic analysis, did not sufficiently consider the cost of increased regulation and ignored the submissions of the NCC. Caution should be exercised by the AEMC in relying on the findings of the ACCC or Dr Vertigan's examination.⁵⁹

⁵⁴ AER, submission to the draft report, pp. 1, 3-4.

⁵⁵ ACCC, submission to the draft report, pp. 3, 8-9.

⁵⁶ PIAC, submission to the draft report, pp. 6-7, 12-14.

⁵⁷ MEU, submission to the draft report, pp. 7-9.

⁵⁸ Submissions to the draft report: AGIG, pp. 1-2; APGA, p. 2; Jemena, p. 3, NCC, p. 7; ATCO, p. 5.

⁵⁹ APA, submission to the draft report, pp. 10-11.

- Recent reforms should be given time to be put into practice by regulators, service providers and customers before decisions are made on related parts of the regulatory framework.⁶⁰
- Work by Dr Vertigan in 2016 concluded that the changes to these parts of the framework are not required.⁶¹ Dr Vertigan recommended a review of the coverage test in five years.
- Consideration and recommendation of change to this aspect of the regime is out of scope for the AEMC.⁶²
- The AEMC has, by raising this topic, created uncertainty and risk for service providers, resulting in an environment which is detrimental to investment.⁶³
- As noted by the AEMC, the current interpretation of the criterion (a) of the coverage test, the 'with-or-without access test', lowers the hurdle for coverage. While there are changes in train for the national access regime that will set aside these precedents and assert the 'with or without regulation' test – these changes are not proposed for the NGL.⁶⁴

Additionally, the NCC recommended that the AEMC give further consideration to whether greenfields pipelines subject to a 15-year no-coverage determination should be automatically exempted from the Part 23 regime given the detrimental impact the existing arrangements may be having on future investment.⁶⁵

Furthermore, the NCC noted its reservations regarding the need and/or benefits of the near-blanket approach to regulation arising from Part 23 regime, although it acknowledged that it was the view of the COAG Energy Council that the coverage determination process should effectively be bypassed.⁶⁶

The NCC noted that a reduction of full or light regulation may be a "natural consequence" flowing from the introduction of Part 23 of the NGR. Unless it could be demonstrated that there is significant market failure that is not able to be remedied by Part 23, and/or that there will be a material improvement in competition in a dependent market as a result of coverage, there may be little utility in imposing full regulation (as the costs may outweigh the benefits).⁶⁷

Only a limited number of stakeholders commented directly on the option for reform put forward by the AEMC. These comments are discussed in Appendix D.

60 Submissions to the draft report: AGIG, pp. 1-2; APA, p. 3; Origin, p. 1; Jemena, p. 3.

61 Submissions to the draft report: AGIG, p. 1; APA, pp. 3, 5, 10; APGA, p. 5; Jemena, p. 3.

62 APA, submission to the draft report, pp. 3, 5.

63 Submissions to the draft report: APA, pp. 5-6; APGA, pp. 2-3.

64 APGA, submission to the draft report, p. 5-6.

65 NCC, submission to the draft report, p. 2.

66 *ibid.*, p. 8.

67 *ibid.*, p. 19.

3.4.3 Commission analysis

Decisions regarding which form of regulation should apply should be made with regard to the extent of market power that can be exercised by the pipeline service provider and the direct and indirect cost of each form of regulation. There are at least three problems with the existing regime which means that it may not conform to this approach.

Firstly, and most significantly, an unintended consequence of the introduction of Part 23 of the NGR is that in the case of pipelines that provide third party access, the coverage determination is no longer a test of whether regulation should be applied or not, but instead is a test of which form of regulation should be applied (full or light on the one hand, or Part 23 on the other). However, the wording of the test is unchanged despite the change in outcomes of the test. The questions being asked by the test are designed for assessing whether regulation should apply, but are not the most appropriate for determining which form of regulation is applied.

This may result in the inappropriate form of regulation applying to a particular pipeline. Both over-regulation and under-regulation could result, leading to additional costs that are ultimately borne by consumers. In the case of over-regulation, the cost is the direct and indirect cost of regulation. In the case of under-regulation, the cost is the inefficiencies that arise from the ability of service providers to exercise their market power. These outcomes are inconsistent with the long-term interest of consumers.

Secondly, as noted by the NCC, the practical effect of introducing Part 23 of the NGR has been to apply near-universal regulation regardless of whether a market failure has been identified on a case-by-case basis. Specifically, the market failure of service providers using market power is assumed. The coverage determination process has in effect been bypassed. The possible impact of this is unnecessary regulation of those pipelines where there is no or only limited or transient market power, with associated direct and indirect costs.

Thirdly, as also noted by the NCC, applying economic regulation under Part 23 to those pipelines that have been granted a 15-year no-coverage determination under the greenfields pipeline incentive framework may risk regulatory over-reach, and may distort investment incentives for new pipelines.⁶⁸ The greenfields pipeline incentives framework was introduced to address concerns regarding the chilling effect of gas access regulation on greenfields investment.⁶⁹ The effects of applying Part 23 to pipelines granted a 15-year no-coverage determination may include:

- a decrease in the effectiveness of the greenfields pipeline incentive framework, because under the framework prospective investors in domestic greenfields pipelines may only obtain an exemption from coverage (that is, full or light regulation) and not from Part 23 (unless they also do not provide third party access)
- an increase of regulatory risk and hence a possible chilling effect on future investment, because prospective investors may perceive a willingness of

⁶⁸ NCC, submission to draft report, pp. 20-21.

⁶⁹ Productivity Commission, *Review of the Gas Access Regime*, June 2004, p. 398-406.

Australian governments to implement regulation to pipelines which had previously been granted a specific, time-limited exemption from it. Having said this, three of the four pipelines that currently have an exemption from coverage under the greenfields pipeline incentive framework also have an exemption from Part 23 as pipelines which do not provide third party access, and so the current impact of this issue may be limited.⁷⁰

The Commission acknowledges that the COAG Energy Council made a deliberate decision to implement near-universal regulation, including to pipelines subject to the coverage exemptions in response to the findings by the ACCC of widespread use of market power by transmission pipeline service providers, and Dr Vertigan's examination.

In practice, the overarching effect of the introduction of Part 23 may be an appropriate increase in regulation to address previous concerns with the regime (discussed in section 3.3) without imposing unnecessary regulation given the widespread monopoly power found by the ACCC, nor having detrimental impacts on future investment. It may be practically more appropriate to apply some form of regulation to (nearly) all pipelines given the likelihood of market power, rather than risking the mis-application of the test for determining whether regulation should be applied (at all) and so under-regulating.

Nevertheless, the introduction of the access regime for non-scheme pipelines has introduced the risk of over- or under-regulation on a case by case basis as a result of the coverage determination being used to determine which form of regulation should apply. The risk of under-regulation in particular is explored in more detail below.

Risk of under-regulation

There is a risk of a reduced application of full regulation with some full regulation pipelines moving to regulation under Part 23 (that is, for the "strength" of regulation to decrease, potentially leading to under-regulation of some pipelines).

This risk arises because the introduction of Part 23 of the NGR may have had the inadvertent effect of making the coverage determination more difficult to satisfy. This could result in less pipelines being covered and subject to full regulation and more pipelines being subject to regulation under Part 23. Whether this risk eventuates is likely to depend on the interpretation of criterion (a) of the coverage determination.

Under the coverage determination process, all of the coverage criteria must be met for a pipeline to be covered. Criterion (a) requires that access (or increased access) to pipeline services provided by means of the pipeline would promote a material increase in competition in a related market. Interpretation of criterion (a) as part of the national access regime, on which the coverage criteria in the NGL are based, has been the subject of substantial debate and disagreement, as summarised in the box below.

⁷⁰ Gladstone LNG (GLNG) Pipeline, Australia Pacific LNG (APLNG) Pipeline and the Comet Ridge to Wallumbilla Pipeline Loop are all subject to both a greenfields 15-year no-coverage determination and an exemption from all requirements under Part 23 because they do not provide third party access. The Wallumbilla-Gladstone Pipeline (WGP), previously known as the Queensland Curtis Pipeline, is subject to a greenfields 15-year no-coverage determination but no exemption from Part 23 and so is subject to regulation under Part 23.

Box 3.4 Interpreting "access" in criterion (a)

There have been various interpretations of "access (or increased access)" within criterion (a) of the coverage criteria in s. 15 of the NGL and recent changes to the national access regime (Part IIIA of the Competition and Consumer Act 2010) in this regard.

Criterion (a) in the national access regime was initially interpreted as requiring a test of whether declaration (equivalent to "coverage" in the gas regime) of the facility in question would promote competition in related markets.⁷¹ That is, it was interpreted as a "with-or-without coverage test".⁷²

However, the decision by the Full Federal Court in the Virgin/SACL case marked a significant departure from the interpretation of criterion (a) that had previously been adopted by the Tribunal.⁷³ The Court was of the view that the word "access" should be read according to its ordinary meaning and not as "declaration under" the access regime. That is, it could be described as a question of whether any use of the facility in question was necessary for competition in the related market – whether the imposition of regulation had any discernible effect on the level of competition in related markets was irrelevant.⁷⁴ Put another way, the two things being compared were not the status quo and the counterfactual as a result of a change to the declaration status of the facility, but instead two potentially hypothetical scenarios: one where no access is provided compared to one where some access is provided. This is known as a "with-or-without access test". This interpretation was recently confirmed by the Federal Court in the Port of Newcastle/Glencore case.⁷⁵

Under this interpretation, the hurdle for coverage is likely to be lower. This is because instead of taking into account the level of access currently being provided, the test considers the hypothetical scenario where no access is provided at all.⁷⁶ Put another way, the difference between the level of competition in related markets in the hypothetical "no access" scenario and the "some access" scenario is likely to be greater than the difference between the level of competition in the coverage scenario versus no-coverage scenario.

Recently, and consistent with the recommendations of both the Productivity

⁷¹ Incenta Economic Consulting, *Assessment of the coverage criteria for the gas pipeline access regime*, September 2015, p. 4.

⁷² A "with-or-without coverage test" is also known interchangeably as a "with-or-without declaration test" or "with-or-without regulation test".

⁷³ *Sydney Airport Corporation Limited v Australian Competition Tribunal* [2006] FCAFC 146.

⁷⁴ Incenta Economic Consulting, *Assessment of the coverage criteria for the gas pipeline access regime*, September 2015, p. 4.

⁷⁵ *Port of Newcastle Operations Pty Ltd v Australian Competition Tribunal* [2017] FCAFC 124.

⁷⁶ This scenario is hypothetical in almost all cases in the gas pipeline sector given that the large majority of gas pipelines are vertically dis-integrated and so provide third party access.

Commission,⁷⁷ and the Competition Policy Review (Harper Review),⁷⁸ criterion (a) of the declaration test within Part IIIA of the *Competition and Consumer Act* (2010) has been changed to make it clear that the original interpretation of the test should be used.⁷⁹

While the gas access regime contained in the NGL is a quite separate regime, there has been some suggestion that the gas access regime coverage criteria could be amended to be more consistent with the national regime.⁸⁰ If that occurred, it would confirm the "with or without coverage" interpretation of the criterion, in turn likely raising the bar for coverage.

The introduction of the access regime for non-scheme pipelines may exacerbate this outcome because the without-coverage scenario nevertheless involves regulation under Part 23 of the NGR. This is likely to further narrow the difference in competition in related markets between the status quo and counterfactual cases. A consequence of this could be an inadvertent (and potentially inappropriate) reduction in the number of full regulation pipelines. New pipelines may be less likely to be covered upon application, while existing pipelines subject to full regulation could, conceivably, apply for a coverage revocation decision given the new counterfactual of regulation under Part 23 now being the alternative to coverage.

The Commission cautions against making changes to the coverage criteria to make them more consistent with those of the national access regime, without also considering more substantial changes to these regulatory decision making arrangements.

Regardless of this specific matter on the prospect of a bias towards under-regulation, the coverage criteria does not appear fit-for-purpose and may be resulting in the wrong form of regulation (over- or under-regulation) applying on a case-by-case basis.

A review of the framework is appropriate

As noted above, many stakeholders agreed with the AEMC's finding in the draft report that there was a risk of the inappropriate form of regulation applying under the current framework and that the Commission should undertake further work to recommend changes to the framework to address this issue.

The Commission is not persuaded by the arguments made in some submissions in favour of retaining the status quo. The risk of the wrong form of regulation potentially applying to pipelines following the introduction of Part 23 appears to be unintended. While the Commission acknowledges that further discussion of this topic creates uncertainty, risk and cost, it considers that the potential benefits of reforms in this area justify this. Furthermore, similar arguments could be made against any regulatory reform.

⁷⁷ Productivity Commission, *National access regime inquiry report*, 2013.

⁷⁸ Harper et al, *Competition Policy Review*, March 2015.

⁷⁹ *Competition and Consumer Amendment (Competition Policy Review) Act 2017*.

⁸⁰ For example, Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, August 2017, p. 16.

The Commission is not in a position to state whether an inappropriate form of regulation is currently being applied in practice. This would require a detailed analysis of the nature and extent of the potential market failures on each pipeline. Nevertheless, the current framework does not appear conducive to selecting the appropriate form of regulation. The Commission therefore does not consider it appropriate to wait for a problem to emerge in the application of the test to a pipeline before making changes to the regime.

Despite the Commission's findings of problems with the existing regime, for a number of reasons it does not consider it to be appropriate to recommend specific changes at this time. Instead, a review should be undertaken by the AEMC to consider reforms to address the issues identified. The review should commence in 2019, coinciding with the planned review of the implementation of Part 23 of the NGR.

The rationale for this recommendation is:

- A full review of the coverage criteria and forms of regulation under the NGL and Parts 4 and 7 of the NGR, and potential changes to Part 23, were outside of the scope of the current review. The review was instead focussed on Parts 8-12 of the NGR. Consequently, the option set out in the draft report involved making a more limited set of changes and may not be the preferred option as part of a broader review of the framework. For this reason, it is not appropriate for the Commission to recommend significant change to the regime such as the option described in the draft report without a full suite of options being carefully considered in consultation with stakeholders.
- Stakeholder engagement with the nature of the problem was substantial, and many concurred that there is a problem. However, their engagement with the option for reform put forward by the Commission in the draft report was limited.
- It is important that the other recommendations of this review are implemented promptly, and that they are not delayed by the consideration and introduction of more substantial NGL changes that would be required to address this issue. Consistent with its terms of reference, this review is primarily a review of Parts 8 to 12 of the NGR and not a more general review of Part 23 or the framework for economic regulation of gas pipelines.
- The already scheduled review in 2019 of the access regime for non-scheme pipelines appears an appropriate time to consider these issues fulsomely given that that review is likely to need to assess many of these issues in any event.

The Commission considers the purpose of the recommended review would be to examine reforms to address the identified issues with the current framework for economic regulation of gas pipelines as discussed with stakeholders to date. The review would consider changes to the framework that promote the national gas objective, balancing the costs and benefits. Specifically, the review would consider:

- the number and type of forms of regulation (see section 3.5 below for a discussion of overlaps between existing forms of regulation), including:
 - forms of regulation under full regulation, light regulation, the access regime for non-scheme pipelines (including the regulation applied to various

exempt pipelines), and pipelines subject to the greenfields pipeline incentives framework

- the tests which determine which forms of regulation apply, including the determination of whether regulation should apply at all, including:
 - the coverage determination process including the coverage criteria, the light regulation determination, the greenfields pipeline incentives framework and the exemption regime in Part 23 of the NGR⁸¹
- related institutional, governance and process arrangements, including whether the processes for applying for and determining which form of regulation applies are fit for purpose, timely, accessible, low cost and conform with best practice regulation and best practice with regard to stakeholder consultation.

The purpose of the review should not be to consider whether there is a problem with the existing regime. The Commission considers that this has been established, as set out in the analysis above. The review would therefore consider what recommendations should be made for changes to the regime, to the extent those changes represented an improvement on the status quo.

There are likely to be synergies between the recommended review and the scheduled review of the access regime for non-scheme pipelines. At the very least, the timeframes of these reviews should be coordinated, and the AEMC and the party undertaking the review of Part 23 should work collaboratively. There may also be a case for the Commission to undertake both tasks (that is, reviewing the broader framework and reviewing Part 23) together as part of the same process, in order to minimise the prospect of uncoordinated reforms. However, the Commission appreciates that as a post implementation review it may be more appropriate for another party to be tasked with the Part 23 review.⁸²

In this review, the Commission has already considered two possible reform options, including the one outlined in the draft report. These options and an analysis of them are provided in appendix E to inform the 2019 framework review.

81 Consideration of the exemption regime of Part 23 should consider whether joint ventures are appropriately exempted.

82 The Office of Best Practice Regulation advises on the regulatory impact analysis process for the Commonwealth and Council of Australian Governments.

3.4.4 Final recommendation

Recommendation 1: Review into the tests and forms of pipeline regulation

The COAG Energy Council should task the AEMC to carry out a review into the governance and processes of the framework for economic regulation of gas pipelines. This review is to consider the tests which determine which form of regulation should apply, the number and type of forms of regulation, and related institutional, governance and process arrangements. This review should be conducted concurrently with (or as part of) the planned review of the access regime for non-scheme pipelines, which is expected to commence in 2019.

3.5 Inconsistencies and overlap between forms of regulation

3.5.1 Summary of draft report analysis and draft conclusions

In the draft report, the Commission noted that there are similarities between light regulation and the access regime under Part 23 of the NGR. Both have the key characteristic of being negotiate-arbitrate regimes with information provision requirements. However, they differ substantially in how this key characteristic is applied.

The Commission acknowledged that having a larger number of forms of regulation comes at a cost by increasing complexity and the administrative burden for regulators, service providers, users and prospective users.

However, there are some elements of light regulation which appear to be more suitable than Part 23 for certain types of pipelines in some circumstances. Removing light regulation therefore seems to be an inappropriate step, as it is a useful option to have in the regulatory toolkit.

Instead, the Commission came to the draft conclusion that at this time, light regulation should be reformed to improve its effectiveness in supporting negotiations between service providers and users. In doing so, the amended form of light regulation recommended by the Commission would be more closely aligned to certain aspects of Part 23. This would serve to improve light regulation and also reduce the complexity of the regulatory framework by reducing the differences between different forms of regulation.

Furthermore, the Commission noted that removing light regulation would be complex. It would require a process to decide whether existing light regulation pipelines should become subject to full regulation or the access regime under Part 23.

Finally, the Commission noted that the forms of regulation are not, in all respects, progressively more intrusive (with the intent of more effectively addressing the market power of the pipeline service provider as the use of that market power is found to be more substantial). For example, the information provision requirements of Part 23 are more intrusive than those of light regulation, despite light regulation pipelines being covered pipelines. Improvements to light regulation would mean that the strength of regulation is progressively stronger between Part 23, light regulation and full regulation.

3.5.2 Stakeholder submissions

In previous submissions to this review, stakeholders have noted the similarity of regulation under Part 23 and light regulation, and many queried whether it is appropriate for both forms to remain in place.⁸³

In submissions to the draft report, a number of stakeholders supported the retention and improvement of light regulation, rather than its removal, consistent with the AEMC's rationale.⁸⁴ Specific additional points regarding this were:

- while a review of the overarching framework is required (see section 3.4), the AEMC's recommendations to improve light regulation in the interim should be implemented. Light regulation should not be removed, at least until a more holistic assessment and vision of the future of gas regulation is developed⁸⁵
- the recommendation to retain light regulation is reasonable, even given there are only a small number of pipelines currently subject to it⁸⁶
- in relation to concerns about the costs imposed by there being multiple forms of regulation, the costs from different forms of regulation, as opposed to the regulation itself, are not likely to be great because there are only three forms⁸⁷
- a benefit of a spectrum of regulatory options which may be applied is that it enables an appropriate balance to be struck between the cost of regulation and the benefits derived.⁸⁸

The NCC submitted that, should light regulation be retained, it supported the AEMC draft recommendations to better align the two forms of regulation.⁸⁹ The ACCC supported the alignment light regulation with Part 23 of the NGR.⁹⁰

However, the NCC, the ACCC and the MEU had reservations about retaining light regulation. The NCC and ACCC had concerns about the complexity and duplication in the framework (with the associated increased regulatory costs) as a result of retaining both light regulation and the Part 23 access regime.⁹¹ The MEU considered that with changes proposed to light regulation by the AEMC, the regulatory cost of light regulation will approach that of full regulation. The rationale for retaining light regulation as an alternative to full regulation - that light regulation reduces the regulatory burden versus full regulation - is therefore diminished.⁹²

83 Submissions to the issues paper: APGA, p. 6; Jemena, p. 4; AGL, p. 2; EnergyAustralia, p. 2; EUAA, p. 1; PIAC, p. 4; APA, pp. 39-42.

84 Submissions to the draft report: AER, pp. 4-5; Origin, p. 1; APA, p. 5; AGL, p. 1; Jemena, p. 3.

85 AER, submission to the draft report, pp. 4-5.

86 AGL, submission to the draft report, p. 1.

87 APA, submission to the draft report, p. 5.

88 Jemena, submission to the draft report, p. 3; submissions to the issues paper: AusNet, p. 3; ENA, pp. 10-11; DBP and AGN, pp. 4 & 12; APGA, p. 6; APA, pp. 39-42.

89 NCC, submission to the draft report, p. 9.

90 ACCC, submission to the draft report, p. 3.

91 Submissions to the draft report: ACCC, pp. 1, 3, 10-12; NCC, p. 9.

92 MEU, submission to the draft report, pp. 10-11.

The NCC suggested further consideration should be given to the option of removing light regulation given its similarity to Part 23 of the NGR.⁹³ The ACCC also considered that it would be appropriate to remove light regulation and make amendments to Part 23 so that those elements of light regulation considered more preferable to Part 23 could be implemented in Part 23, either now or as part of the 2019 review.⁹⁴ The NCC also provided suggestions about how Part 23 could be improved incorporating any desirable features of light regulation.⁹⁵

The potential changes to Part 23 to make it more similar to light regulation that were identified are the following:

- Allow a prospective user of a pipeline subject to Part 23 to choose whether the arbitrator should be the regulator or a commercial arbitrator. This would allow all users, not just a subset of users that are utilising light regulation pipelines, to have recourse to a regulator-led arbitration. This change might be implemented in the future, rather than immediately.⁹⁶
- Include safeguards in Part 23 that have been in full and light regulation since the gas regime was first enacted – such as associated contract provisions and ring-fencing obligations to mitigate and control the risks of anti-competitive conduct by service providers.⁹⁷

The ACCC did not consider that the removal of light regulation would be premature given the recent introduction of Part 23. It noted that the AEMC is recommending the use of much of Part 23's information provision regime, so this aspect of Part 23 does not appear to cause concern as being too novel. Furthermore, the arbitration mechanism under light regulation has never been used, so does not provide much precedent to prospective users.⁹⁸

Both the NCC and ACCC highlighted the transitional issues related to removing light regulation. The NCC acknowledged that it would be important to be mindful of them, but that they were not insurmountable.⁹⁹ The ACCC's preference, were light regulation to be removed, would be for those pipelines currently subject to light regulation to be regulated under Part 23 of the NGR. This is consistent with the decisions made for 4.5 out of five of these pipelines by the NCC within the last ten years: that they do not have sufficient levels of market power to justify full regulation.¹⁰⁰ PIAC also highlighted the importance of determining how pipelines would be transitioned to another form of regulation should light regulation be removed.¹⁰¹

93 NCC, submission to the draft report, p. 9.

94 ACCC, submission to the draft report, pp. 10-12.

95 NCC, submission to the draft report, p. 10.

96 ACCC, submission to the draft report, p. 11.

97 NCC, submission to the draft report, p. 10.

98 ACCC, submission to the draft report, pp. 11-12.

99 NCC, submission to the draft report, p. 9.

100 ACCC, submission to the draft report, p. 11.

101 PIAC, submission to the issues paper, p. 4.

The ACCC noted that while some stakeholders have expressed a preference for the regulator as arbitrator (a feature of light and full regulation other than in Western Australia), this contradicts the feedback received by Dr Vertigan in his examination. In that case, stakeholders expressed a preference for quick and less onerous form of regulation, as subsequently reflected in the intent of Part 23. This is consistent with the ACCC's own experience as arbitrator in other access regimes outside of the gas sector. Furthermore, the ACCC noted that it is the Energy Disputes Arbitrator for Western Australia and not the ERA which arbitrates access in that state, highlighting that even under full or light regulation, the arbitrator is not always the regulator.¹⁰²

3.5.3 Commission analysis

Overlap between light regulation and the access regime for non-scheme pipelines

There are similarities between light regulation and the access regime under Part 23 of the NGR. Both have the key characteristic of being negotiate-arbitrate regimes with information provision requirements. However, they differ substantially in how this key characteristic is applied, as discussed in Appendix C.

There are both advantages and disadvantages to having multiple forms of regulation.

Having a larger number of forms of regulation comes at a cost. It can increase complexity and administrative burden for the regulators, service providers, users and prospective users. It may also present a challenge for the relevant decision maker to choose between them in a form of regulation determination, were the options discussed in Appendix D implemented.

However, there are also advantages to having multiple forms of regulation from which to choose. It allows the regulation applied to be fine-tuned to the circumstances in question, allowing for a more precise trade-off between regulatory costs on the one hand and addressing the market failure in question on the other. Indeed, light regulation was introduced into the gas pipeline regulation regime within the NGL and NGR to provide a more 'fit for purpose' regulatory approach for some pipelines.¹⁰³

There are also some elements of light regulation which appear to be more suitable than Part 23 for certain types of pipelines in some circumstances. This includes a number of the arbitration provision requirements, including the identity of the arbitrator, and a number of ring-fencing and other additional regulatory requirements discussed in Appendix C that do not apply to non-covered pipelines. Removing light regulation therefore seems to be an inappropriate step, as it is a useful option to have in the regulatory toolkit.

Furthermore, removing light regulation would be complex, with a process required to decide whether existing light regulation pipelines should become subject to full regulation or the access regime under Part 23 of the NGR. Moving from light to full regulation would appear to contradict the light regulation determinations made by the NCC, or in the case of the Carpentaria Gas Pipeline, the decision made by the Queensland Government.

¹⁰² ACCC, submission to the draft report, pp. 10-11.

¹⁰³ *National Gas (South Australia) Bill 2008*, second reading speech, July 2008, p. 7.

Careful consideration would also need to be given to whether it is appropriate to move the existing distribution pipelines subject to light regulation to Part 23. There are also legal limitations on the ability to remove light regulation for Carpentaria Gas Pipeline, which might only be able to be done prior to 2023 through changes to Queensland legislation.¹⁰⁴ While the Commission agrees that these transitional issues may not be insurmountable, they nevertheless are a consideration and would require resolution.

Therefore, making changes to light regulation to strengthen it and make it more relevant to supporting negotiations between users and service providers is the most appropriate step at this time. The effect of these changes will be to more closely align light regulation with Part 23 of the NGR where it is appropriate to do so. This improves light regulation and also reduces the complexity of the regulatory framework by reducing the differences between different forms of regulation.

Not all provisions included in Part 23 of the NGR have been incorporated into the light regulation regime. The Commission has carefully considered each aspect on a case by case basis. Why specific Part 23 features can also be applied to light regulation pipelines is discussed in detail in following chapters. In short:

- A number of the information provision requirements of Part 23 appear to better meet the NGO than those currently required of light regulation pipelines and the Commission has recommended applying similar obligations to light regulation pipelines. However, some of the Part 23 requirements do not appear workable for distribution pipelines, so the Commission recommends adopting them in a modified manner. See Chapter 8.
- In some circumstances, the arbitration requirements for light regulation pipelines appear to be more suitable for certain types of pipelines than those requirements contained in Part 23. Consequently it is appropriate that some differences in the form of regulation be retained in this regard. See Chapter 9.
- For certainty in negotiations and arbitrations, the Commission also recommends that the regulators determine an initial capital base for all light regulation pipelines that do not have such a determination already. This approach is not included under the Part 23 access regime. See Chapter 7.

Table 3.1 summarises the key differences between the amended light regulation regime under the Commission's final recommendations and the Part 23 access regime for non-scheme pipelines.

¹⁰⁴ Section 15A of the *National Gas (Queensland) Act* (2008).

Table 3.1 Key differences between amended light regulation and access regime for non-scheme pipelines

	Amended light regulation under final recommendations	Access regime for non-scheme pipelines
Information publication and disclosure	Prescriptive information disclosure provisions on usage and financial information. Inclusion of provisions specifically relevant to distribution pipelines.	Prescriptive information disclosure provisions on usage and financial information.
Arbitration	The objective is the NGO.	The objective of Part 23 is to facilitate access to pipeline services on non-scheme pipelines on reasonable terms, which is taken to mean at prices and on other terms and conditions that reflect the outcomes of a workably competitive market.
	AER or the Western Australian Energy Disputes Arbitrator is the dispute resolution body and can appoint a dispute resolution expert with a broad and clear role.	In consultation with disputing parties, the scheme administrator (AER or ERA) selects arbitrator from pool of commercial arbitrators as established and maintained by the scheme administrator.
	Pricing and revenue principles refer to efficient costs.	Pricing principles do not expressly reference efficient costs (interpretation will be guided by the objective).
	All light regulation pipelines will have initial capital base determinations. The framework will clarify how the dispute resolution body can roll forward the capital base of a light regulation pipeline (if required).	Asset valuation is only determined in an arbitration and is not binding for any subsequent arbitrations. Arbitrator must take account of past returns in setting the asset values unless it is inconsistent with the objective of Part 23.
	Arbitration hearing may be public, dispute resolution body may hold joint dispute hearings and parties may join existing disputes, confidentiality of material must be claimed, and parties to a dispute must comply with the arbitrator's access determination.	Arbitrator's rulings and access determination are confidential (other than the requirement of rule 581(1) of the NGR for publication of some information after the conclusion of the arbitration proceedings). The scheme administrator may join a party to a dispute if it requires it to do something.
	Fast-tracked dispute resolution process of 50 business days under specified circumstances.	Up to 65 business days or up to 105 business days upon agreement of parties - periods for provision of information by parties or for experts to consider matters are discounted.

	Amended light regulation under final recommendations	Access regime for non-scheme pipelines
Other regulatory requirements	Requirements not to hinder access or price discriminate.	Publication of access information that may include queuing requirements (rule 553(2)(e)).
	Queuing requirements for transmission pipelines (and if required by the regulator for distribution).	
	Structural and operational separation requirements (ring fencing): <ul style="list-style-type: none"> • provision of list of associates of the service provider, including those that provide pipeline services or related services, and associate contracts • keeping separate accounts for each covered pipeline and consolidated business accounts • providing audited financial reports. 	
	Service bundling requirements.	

As noted above, some stakeholders have suggested reform should be made to Part 23 of the NGR to align it to aspects of light regulation (rather than the other way around) and for the removal of light regulation. This would retain the benefits of those preferable aspects of light regulation within the amended Part 23 regime, while reducing the complexity of framework. In effect, the remaining form of regulation would merge the two existing forms of regulation and contain the "best bits of both".

While the Commission acknowledges the benefits of a simplified framework through the removal one of the existing forms of regulation, it does not consider this approach to be appropriate at this time. Part 23 has only been recently introduced. Changes to Part 23 now therefore appear to be premature, particularly given its upcoming post-implementation review in 2019. Furthermore, complete alignment of Part 23 with light regulation (and the removal one or the other of these identical forms) would require amendments to either:

- some aspects of Part 23 that are fundamental to the underlying design and premise of Part 23 - most notably the use of a commercial arbitrator rather than the regulator (in the case of the eastern states). Making such radical changes to Part 23 would appear at odds with the rationale for introducing Part 23, and regardless is not consistent with the scope of this review which is focused on Parts 8 to 12 of the NGR,, or
- aspects of light regulation that appear to be preferable to those of Part 23 for some pipelines in some circumstances, as discussed in Chapters 7 to 9. As noted above, the removal of these aspects of regulation from the toolkit does not seem appropriate.

As noted by the ACCC, further consideration and consolidation of Part 23 with light regulation could be considered as part of the Commission's recommended review of the framework for economic regulation (recommendation 1), which will coincide with (or be part of) the planned review of the access regime for non-scheme pipelines. As the ACCC's suggests, this review could include consideration of whether a user should be provided the choice of a commercial arbitrator or a regulator as arbitrator. This may bridge a significant difference between the regimes, but would likely require a substantial change to Part 23.

"Strength" of regulation not successively stronger

Currently, the forms of regulation are not, in all respects, progressively more intrusive, with the intent of addressing the use of market power of the pipeline service provider more substantially with each progression. For example, the information provision requirements of Part 23 of the NGR are more intrusive than those of light regulation, despite light regulation pipelines being covered pipelines.

This could lead to a number of inappropriate outcomes. In particular, some stakeholders have suggested that service providers could "forum shop" by seeking, through the various tests for determining which form of regulation applies, a form of regulation which while notionally stronger is in fact less strong than alternatives.¹⁰⁵

The Commission does not consider "forum shopping" a significant issue that requires addressing at this time. For any service provider to move from one form of regulation to another, at least one public consultation based decision making process is required to be undertaken. This by no means provides a service provider with a significant degree of control over the outcome. Nevertheless, service providers (as well as other stakeholders) are able to initiate such processes to have the form of regulation that is applied to a pipeline re-considered.

The changes to light regulation noted above and discussed in more detail in Chapter 8 should reduce this "mis-ordering" of regulatory strength. With respect to the information provision requirements, for example, light regulation will feature a number of aspects already contained in Part 23 of the NGR. This should have the effect of making light regulation equally effective at balancing the information asymmetry between service providers and users when negotiating about pipeline services.

By increasing the strength of light regulation, such changes should also serve to address the concern that light regulation is insufficiently strong to address the use of pipeline service provider market power.

Stakeholders tended to agree with this assessment, to the extent they considered that retaining and improving light regulation is appropriate.

¹⁰⁵ Hydro Tasmania, submission to issues paper, p. 2.

3.5.4 Conclusions

The Commission concludes that:

- an amended form of light regulation should be retained in the NGR (with the amendments recommended to improve light regulation are included in the relevant subsequent chapters of this final report)
- the amended form of light regulation should incorporate certain aspects of the access regime for non-scheme pipelines (Part 23) in order to:
 - improve and strengthen light regulation
 - improve the usefulness of light regulation pipeline information for users negotiating services on those pipelines
 - more closely align light regulation with the access regime for non-scheme pipelines, in order to reduce the framework's complexity
 - allow for the "strength" of each form of regulation to become the same or stronger when progressing from Part 23 to light regulation to full regulation.

Further consideration should be given to amendments to light regulation and Part 23 of the NGR as part of the recommended review of the governance and processes regarding the framework for economic regulation (recommendation 1), coincident with (or as part of) the scheduled review of Part 23 in 2019.

4 Expansions and extensions

Box 4.1 Summary of findings and recommendations

Extensions of a pipeline increase the geographic range of the pipeline. Expansions are augmentations of a pipeline's capacity that are achieved through the addition of compressors or looping.

The regulatory framework for extensions and expansions currently depends on the form of regulation that applies to the original pipeline that is being extended or expanded. The NGR require a full access arrangement and a limited access arrangement for a light regulation pipeline to include extension and expansion requirements. The requirements may state whether the applicable access arrangement will apply to services to be provided as a result of an extension to, or an expansion of the capacity of, the pipeline. For a light regulation pipeline with no limited access arrangement, an extension or expansion is covered unless the regulator decides otherwise.

The Commission's recommendations are unchanged from the draft recommendations in relation to extensions and expansions, as follows:

- include all expansions in an access arrangement
- remove the regulator's discretion to exclude an expansion from light regulation pipelines
- enable existing extensions to be included in access arrangements.

The Commission considers that the treatment of all expansions of covered pipelines as part of the covered pipeline would prevent the service providers from monopolistic pricing over the expansions, which is in the long term interest of consumers.

However, extensions should continue to be treated on a case by case basis, as they may constitute laterals that face sufficiently different market landscapes from the covered pipelines themselves. This promotes efficiency in balancing the cost and benefit of regulation in each case.

This chapter discusses the treatment of expansions of, and extensions to, covered (full and light regulation) pipelines. Section 4.1 of this chapter provides an overview of the current framework in the NGL and NGR. This is followed by:

- section 4.2 – on the issues and recommendations regarding pipeline expansions
- section 4.3 – on the issues and recommendations relating to the treatment of pipeline extensions.

4.1 Current framework

Extensions of a pipeline increase the geographic range of the pipeline. A lateral that connects to the original pipeline and has the same service provider as the original pipeline is regarded as an extension. A lateral that connects to the original pipeline but

is not owned by the original pipeline service provider is not an extension but a separate pipeline, and would be treated as such for regulatory purposes.

Expansions are augmentations of a pipeline's capacity that are achieved through the addition of compressors or looping. The geographic reach of the pipeline is not impacted by an expansion.¹⁰⁶

The regulatory framework for extensions and expansions currently depends on the form of regulation that applies to the original pipeline that is being extended or expanded. This section discusses the approach to extensions and expansions first for scheme or covered pipelines, and then with reference to non-scheme pipelines.

Section 18 of the NGL states that an extension or expansion to a covered pipeline must be taken to be part of a covered pipeline if the extension and expansion requirements in an access arrangement will apply to services provided by means of the covered pipeline as extended or expanded.

The NGR require a full access arrangement (under rule 48) and a limited access arrangement for a light regulation pipeline (under rule 45) to include extension and expansion requirements.¹⁰⁷ As part of an access arrangement, these requirements must be approved by the regulator. Rule 104 of the NGR states that the extension and expansion requirements:

- may state whether the applicable access arrangement will apply to services to be provided as a result of an extension to, or an expansion of the capacity of, the pipeline
- may outline the basis to later determine whether the applicable full access arrangement will apply to services to be provided as a result of a pipeline extension or expansion
- for a full access arrangement, must specify the impact on tariffs in cases where the access arrangement applies to incremental services as a result of an extension or expansion.

The effect of s. 18 of the NGL is that a full regulation pipeline service provider has the ability to propose an approach in an access arrangement proposal through proposed extension and expansion requirements. In assessing the proposal, the regulator may decide not to approve the proposed approach and decide that an alternative approach must be included in the access arrangement.

For light regulation pipelines that do not have a limited access arrangement, s. 19 of the NGL states that an extension or expansion of the pipeline must be taken to be part of the covered pipeline unless the regulator determines otherwise in writing.

Extensions and expansions not included in a full or limited access arrangement will not be part of a covered pipeline, and will therefore be a non-scheme pipeline under the NGL. For this reason, Part 23 of the NGR will apply to these parts of a covered pipeline, subject to any applicable exemption under rule 585 of the NGR.

¹⁰⁶ Compressor pumps increase gas pressure on their output side. Loops are extra sections of pipe that are added in parallel to existing sections.

¹⁰⁷ The definition of 'extension and expansion requirements' is set out in s. 2 of the NGL.

The regulatory regime under Part 23 applies to non-scheme pipelines. An extension to or expansion of a non-scheme pipeline will be treated as part of the relevant non-scheme pipeline and therefore also be subject to Part 23 (subject to the exemption categories in rule 585 of the NGR).

If an expansion or extension is uncovered, any person can apply to the NCC for its coverage. The NCC applies the coverage criteria to make a coverage recommendation for the relevant Minister to then make a coverage determination.

Table 4.1 provides a summary of the current regulatory approach to extensions and expansions.

Table 4.1 Current approach to extensions and expansions

Form of regulation applied to pipeline	Coverage of expansion	Coverage of extension
Full regulation Light regulation - with limited access arrangement ^a	The regulator determines if an access arrangement applies to the services provided by an expansion. If the access arrangement applies, then the expansion is part of the covered pipeline and the same form of regulation will apply to it (s. 18 of the NGL). Otherwise, Part 23 applies to the expansion.	The regulator determines if an access arrangement applies to the services provided by an extension. If the access arrangement applies, then the extension is part of the covered pipeline and the same form of regulation will apply to it (s. 18 of the NGL). Otherwise, Part 23 applies to the extension.
Light regulation - no limited access arrangement	An expansion is included as part of the covered pipeline and light regulation will apply to those services unless the regulator determines otherwise. (s. 19 of the NGL)	An extension is included as part of the covered pipeline and light regulation will apply to those services unless the regulator determines otherwise. (s. 19 of the NGL)
Non-scheme pipeline	Part 23 also applies to expansions of the pipeline.	Part 23 also applies to extensions of the pipeline.

Note: (a) None of the service providers of light regulation pipelines have submitted a limited access arrangement under rule 45 of the NGR.

4.2 Expansions of full and light regulation pipelines

4.2.1 Summary of draft report findings and draft recommendations

In its draft report, the Commission observed that the discretion available under the relevant rules regarding the regulatory treatment of expansions has resulted in inconsistent treatment over time. For example, it was noted that 46 per cent of the capacity of the Goldfields Gas Pipeline is uncovered.¹⁰⁸

The Commission found that a service provider is able to benefit from market power over both the existing covered pipeline and the expansion to the extent the original pipeline confers market power to its owner. This is due to a pipeline expansion facing similar barriers to entry and similar potential competitors to the pipeline itself.

¹⁰⁸ ERA, Final decision on proposed revisions to the access arrangement for the Goldfields Gas Pipeline, June 2016, p. 5.

There would be additional regulatory costs and complexity from having parts of the same pipeline subject to different regulatory requirements (that is, an access arrangement for the original pipeline and Part 23 for the uncovered expansion).

Therefore, the Commission concluded that if a pipeline is covered, then any expansion of that pipeline should also be covered and included in either the full or limited access arrangement (as relevant to the covered pipeline). This should prevent any market power being used to monopoly price the services provided by the expansion.

Consequently, the Commission made the following draft recommendations.

Draft recommendation 1: Include all expansions in an access arrangement

That the NGR be amended such that:

- all future expansions be included in access arrangements
- an existing expansion that is not included in the existing access arrangement must be included in the access arrangement at the next access arrangement revision.

Draft recommendation 2: Remove regulator's discretion to exclude an expansion from light regulation

That the framework be amended such that:

- the regulator's discretion to exclude an expansion from a light regulation pipeline under s. 19 of the NGL be removed
- expansions that have been excluded from a light regulation pipeline without a limited access arrangement are to be treated as part of that pipeline.

4.2.2 Stakeholder submissions to draft report

The draft recommendation to include all existing and future pipeline expansions in an access arrangement was supported by the ACCC, AGL, ATCO, ERA and PIAC:

- The ACCC and AGL considered that the draft recommendation would help address concerns regarding the potential exercise of market power. ATCO considered that the recommendation promotes regulatory consistency and may reduce regulatory costs for relevant pipelines.¹⁰⁹
- The ERA noted that uncovered expansions use regulated assets that have been covered because they are natural monopolies. It considered that service providers are able to charge users higher than the incremental cost for uncovered expansions, while also receiving the reference tariff for reference services that use the covered assets. It was concerned that service providers are likely to charge tariffs as close as possible to each user's opportunity cost.¹¹⁰
- PIAC considered that expansions of a pipeline are likely to require the same regulatory treatment as the existing pipeline.¹¹¹

¹⁰⁹ Submissions to the draft report: ACCC, p. 7; AGL, p. 1; ATCO, p.5.

¹¹⁰ ERA, submission to the draft report, pp. 1-2.

¹¹¹ PIAC, submission to the draft report, p. 7.

This draft recommendation was not supported by APA. It considered that a decision on the inclusion of expansions (or extensions under draft recommendation 3) should remain at the discretion of the regulator or subject to a coverage decision by the NCC. APA considered that the draft recommendations bypass the coverage test and undermine the legislative framework. It stated that the AEMC had not given any consideration to the market impact and sovereign risk implied by the draft recommendation.¹¹² APA also considered that removing regulatory discretion in this instance is contrary to other draft recommendations that provide greater regulatory discretion.¹¹³ It considered that this 'different view' has not been clarified by the AEMC.

APGA and Origin also raised concerns with the draft recommendation, noting that it removes the flexibility of the regulatory framework. APGA considered that there was no evidence of uncovered expansions providing monopoly power, or impacting cost allocation or tariff setting rules. It also noted that if a regulator was concerned that a service provider would engage in monopoly pricing, it should not allow the expansion to be uncovered.¹¹⁴ Origin commented that it understood the AEMC's recommendation for a consistent approach to the treatment of expansions for covered pipelines. However, it also noted that there may be some instances where avoiding the costs of regulating an expansion may be in the best interests of consumers. Consequently, Origin suggested the AEMC consider if some flexibility should be retained.¹¹⁵

There were few comments specifically related to the draft recommendation to remove the regulator's discretion to exclude an expansion from light regulation. This draft recommendation was supported by AER, ERA and PIAC, with little discussion provided.¹¹⁶

4.2.3 Commission analysis

The discretion allowed under the NGR, discussed in section 4.1, provides flexibility to exclude expansions from access arrangements. For example:

- In the current Central Ranges Pipeline access arrangement, the service provider does not have the discretion to exclude expansions from being part of the covered pipeline.¹¹⁷
- In the current Roma to Brisbane Pipeline access arrangement, the access arrangement will apply to incremental services provided as a result of an expansion at the time it comes into operation, unless the service provider proposes and the AER agrees that the access arrangement will not apply.¹¹⁸

¹¹² APA, submission to the draft report, pp. 6-7.

¹¹³ APA, submission to the draft report, p. 7.

¹¹⁴ APGA, submission to the draft report, p. 6.

¹¹⁵ Origin, submission to the draft report, p. 1.

¹¹⁶ Submissions to the draft report: AER, p. 6; ERA, p. 2; PIAC, p. 7.

¹¹⁷ Access Arrangement for Central Ranges Pipeline, November 2005, p. 28.

¹¹⁸ Access Arrangement for Roma Brisbane Pipeline, November 2017, pp. 40-41.

In the previous Goldfields Gas Pipeline access arrangement, the service provider elected at some point in time whether or not a proposed expansion of the capacity of the pipeline should be treated as part of the covered pipeline and the ERA made an express determination in response.¹¹⁹

The impact of the discretion afforded to the regulators by the NGR has to date been limited to full regulation contract carriage transmission pipelines.¹²⁰

While some stakeholders such as APGA and Origin favoured the current approach being retained in the NGL and NGR, the majority of stakeholders did not support it and the Commission does not consider this flexibility to be appropriate.¹²¹ The Commission considers that the better regulatory arrangement is for expansions to a pipeline to be subject to the same regulatory framework or treatment as the original pipeline. For a covered pipeline, any expansion to its capacity should be treated as part of that covered pipeline.¹²² This is because uncovered capacity on a covered pipeline may lead to:

- Difficulty for regulators in responding to proposals not to apply access arrangements to expansions, particularly those made with reference to the coverage criteria. The ERA distinguishes its consideration of the coverage criteria in determining whether to apply an access arrangement to an expansion from coverage determinations for pipelines that are made by the relevant minister upon recommendation by the NCC.¹²³
- The service provider holding market power over the uncovered capacity, enabling it to charge monopoly prices for services using the expansion. This concern was expressed by the ACCC, which considered that pipeline service providers may be able to engage in monopoly pricing on the expanded capacity in a relatively unconstrained manner. The ERA concluded this to be the case for the Goldfields Gas Pipeline.¹²⁴
- The reference tariff may include costs associated with the uncovered capacity. An expansion leverages off the existing pipeline infrastructure. Having uncovered capacity on a full regulation pipeline makes cost allocation more complex and could result in users paying for costs that are not relevant to the services they use. This is not in the interest of gas consumers. In addition, the current cost allocation rules are ambiguous in providing guidance on how to allocate costs between covered and uncovered capacity of a pipeline. This issue is discussed in Chapter 7.

¹¹⁹ The previous Goldfields Gas Pipeline access arrangement was made under the code. The access arrangement applied the same requirements to both extensions and expansions.

¹²⁰ Distribution pipelines have a different business model for extensions and expansions, given their meshed nature and small customer connectivity. There are no light regulation pipelines with limited access arrangements, and the regulators have not exercised their discretion to exclude extensions or expansions from light regulation pipelines.

¹²¹ Submissions to the draft report: APGA, p.6; Origin Energy, p.1.

¹²² And similarly for pipelines subject to Part 23 of the NGR as currently provided.

¹²³ ERA, *Issues paper - Goldfields Gas Transmission's proposed expansion of the Goldfields Gas Pipeline*, 3 November 2014, pp.13-14.

¹²⁴ ERA, Final decision on proposed revision to the access arrangement for the Goldfields Gas Pipeline, as amended on 21 July 2016, pp. 430-431, 517.

- Regulation is more complex. Having covered and uncovered parts of a pipeline will have the effect that a single pipeline will be required to comply with two regulatory regimes, as the uncovered part of the pipeline will be subject to Part 23 of the NGR. An example of the increased complexity is that an access arrangement will be in place for a full regulation pipeline but a service provider will be required to report financial information under Part 23 for an uncovered part of that pipeline. The Commission recognises that extent of such additional regulatory costs may not be significant. Nevertheless, there will be costs that pipeline users and ultimately gas consumers will pay without obtaining any benefit.

The Commission also notes that it is very likely that a pipeline expansion faces substantially the same market landscape as the pipeline itself, and that as such it should be subject to the same form of regulation. APA has stated that, in its view, this question should be resolved by empirical analysis.¹²⁵ However, APA has not presented a case for when the pipeline expansion would actually face a different landscape from the pipeline itself. The Commission considers that APA's reference to sunk costs and economies of scale further enhances the point that there could not be a viable substitute for the expansion of a pipeline in the case where there is no viable substitute for the pipeline itself. As such, an expansion would face the same barriers to entry and link to the same upstream and downstream markets as the pipeline itself.

APA also expressed concern that the draft recommendation to cover existing expansions would, if made, increase sovereign risk and dampen investment incentives.¹²⁶ To these concerns, the Commission notes:

- A feature of the current regulatory framework is that the NGR are dynamic and the AEMC is expected to review and change rules over time, with any changes only made following consultation.
- The gas pipeline economic regulation framework allows for coverage of a pipeline to be revisited by application at any time (except for 15 years for pipelines that have been granted a 15-year no-coverage determination). Accordingly, the ability of the regulatory status of a pipeline to change over time would be taken into account when making an investment decision.
- Moreover, proposals made by service providers to the regulator not to include an expansion in an access arrangement have been made after the expansion has been built. As such, the investment decision to build the expansion could not have been incentivised by knowing that the expansion would be an uncovered asset as that would not have been guaranteed at the time of investment.

APGA considered that there was no evidence of uncovered expansions providing monopoly power.¹²⁷ Conversely, the ERA noted that uncovered expansions use regulated assets that have been covered because they were natural monopolies. It considered that service providers are able to charge users higher than the incremental

¹²⁵ APA, submission to the draft report, pp. 7-9.

¹²⁶ *ibid.*, pp. 6-7.

¹²⁷ APGA, submission to the draft report, p. 6.

cost for uncovered expansions, while also receiving the reference tariff for reference services that use the covered assets. It was concerned that service providers are likely to charge tariffs as close as possible to each user's opportunity cost.¹²⁸

APA considered that the draft report did not clarify the appropriateness of removing regulatory discretion to exclude expansions from access arrangements in contrast with other draft recommendations that provide greater regulatory discretion.¹²⁹ APGA and Origin also considered that the regulator should retain the flexibility as to whether or not to cover an expansion.¹³⁰ The Commission acknowledges that the recommended approach to pipeline expansions removes some current discretion from regulators. However, the regulators supported the draft recommendation.¹³¹ Moreover, the Commission considers that the NGR should allow regulatory discretion but only within the NGO. The Commission has not found any instance where excluding an expansion from the covered pipeline would serve the NGO. Given the potential for regulatory complexity and concerns regarding monopoly pricing raised by stakeholders, the Commission considers that removing some discretion from the regulator in this case is appropriate.

Consistent with its draft recommendations, the Commission has concluded that if a pipeline is covered, then any existing or new expansion of that pipeline should also be covered in order to:

- prevent any market power being used to monopoly price the services provided by the expansion or to cross subsidise the expansion through reference tariffs
- avoid the administrative costs and regulatory complexity of having capacity on the same pipeline subject to multiple regulatory regimes.

In the draft report, the Commission also assessed the specific case where expansions are required as a result of an extension to a pipeline. The Commission's conclusions under such a scenario have not changed. If a pipeline is covered, then any existing or new expansion of that pipeline that is associated with an extension should also be covered.

These conclusions are summarised in Table 4.2.

128 ERA, submission to the draft report, pp. 1-2.

129 APA, submission to the draft report, p. 7.

130 Submissions to the draft report: APGA, p.6; Origin, p.1.

131 Submissions to the draft report: ACCC, p. 7; ERA, pp.1-2.

Table 4.2 Recommended approach for expansions

Form of regulation applied to pipeline	Coverage of existing expansion	Coverage of new expansion
Full regulation Light regulation - with limited access arrangement	An existing expansion included in the current access arrangement will remain included and be treated as part of the covered pipeline. The form of regulation applied to the pipeline applies to the expansion. An existing expansion that is not included in the current access arrangement will be included in the access arrangement from the next access arrangement period. The expansion will be treated as part of the covered pipeline and the form of regulation applied to the pipeline will apply to the expansion.	A new expansion will be included in the access arrangement of the relevant pipeline and be treated as part of that covered pipeline. The form of regulation applied to the pipeline will apply to the expansion.
Light regulation - no limited access arrangement	An existing expansion that is treated as part of the covered pipeline will remain treated as part of that pipeline. Light regulation applies to the expansion. An existing expansion that the regulator has determined to not be treated as part of the covered pipeline will be treated as part of that pipeline. Light regulation will then apply to the expansion.	A new expansion will be treated as part of the covered pipeline and light regulation will apply to that expansion.
Non-scheme pipeline	Part 23 applies to existing expansions of the pipeline.	Part 23 applies to new expansions of the pipeline.

The Commission recommends that this approach be applied to full regulation pipelines to bring existing uncovered expansions into the relevant access arrangements. It should also remove the current discretion on the regulatory treatment of new expansions from revised access arrangements from the first access arrangement review after the commencement of the relevant rules. The Commission's recommended approach on the valuation of an existing expansion and the method to roll existing expansions into the capital base is discussed in Chapter 7.

The recommended approach outlined above will apply to light regulation pipelines after the relevant NGL amendments come into effect.

The greater certainty on the coverage status of expansions of covered pipeline provides a clear framework under which investment decisions can be made. The Commission expects that the treatment of all expansions of covered pipelines as covered would prevent the service providers from monopolistic pricing over the expansions, which is in the long term interest of consumers. The Commission considers that these outcomes are consistent with the NGO.

4.2.4 Final recommendations

Recommendation 2: Include all expansions in an access arrangement

Amend the NGL and NGR such that:

- any future expansions of a covered pipeline be treated as part of the relevant covered pipeline and included in the access arrangement
- an existing expansion of a covered pipeline that is not included in the existing access arrangement must be included in the relevant access arrangement at the next access arrangement revision.

The proposed amendments are reflected in the drafting instructions of amendments to ss. 2 and 18 of the NGL, as well as draft changes to rule 104 and proposed transitional rules.

Recommendation 3: Remove the regulator's discretion to exclude an expansion from light regulation

Amend the NGL such that:

- the regulator's discretion to exclude an expansion from light regulation is removed
- expansions that have been excluded from a light regulation pipeline without a limited access arrangement become treated as part of that pipeline.

The proposed amendments are reflected in the drafting instructions of amendments to ss. 2 and 19 of the NGL.

4.3 Extensions to full and light regulation pipelines

4.3.1 Summary of draft report findings and draft recommendations

The Commission considered that a pipeline extension may face a different market landscape than the pipeline itself. For example, a pipeline and a pipeline extension may confer on its service provider differing degrees of market power, different risks reflecting the different end use customers, different vertical integration issues and potentially different competitors. However, the difference between the original pipeline and the extension will vary according to circumstances, and in some cases, may not be significant.

Therefore, the Commission concluded that the question of whether an extension should be included in a pipeline's access arrangement should continue to be resolved on a case by case basis. This is consistent with the current NGR and so no changes were required in relation to new extensions to full or light regulation pipelines.

Relatedly, the Commission concluded that the ability to include an existing extension as part of a covered pipeline, and consequently an access arrangement, should be made available to service providers. Associated recommendations were made to provide a methodology for the valuation of such existing extensions and how to include these assets in the capital base.

Draft recommendation 3: Enable existing extensions to be included in access arrangements

That the NGR be amended to permit a service provider to seek an existing extension to a scheme pipeline be included in the relevant access arrangement. This option is to be available at the next access arrangement revision.

4.3.2 Stakeholder submissions to draft report

The draft recommendation to allow, but not require, the inclusion of existing extensions in the next access arrangement was supported by ACCC, AGL and PIAC. PIAC considered that some regulator discretion should be retained for extensions as a means of preventing service providers from recovering a regulated price from consumers for speculative extensions. It considered this to be a particular concern in relation to distribution pipelines where existing customers may end up cross-subsidising investments to reach new customers.¹³² However, ATCO noted that the draft recommendation may not have a material impact on gas distribution pipelines since most of the extensions already tend to be covered by access arrangements.¹³³

The MEU suggested that further to the draft recommendation, the regulator should have discretion to override the decision of a service provider to not include an extension in the access arrangement. It considered that this is needed because service providers can make a decision on coverage relatively easily under the access arrangement. In contrast, the MEU considered that a user that wishes to seek coverage of a pipeline must go through an extensive coverage process that represents a significant hurdle.¹³⁴

The ERA also suggested amending the draft recommendations. It considered that all extensions should be automatically covered, similar to expansions under draft recommendation 1, because:¹³⁵

- Extensions to distribution pipelines should be automatically covered given the large number of small extensions that regularly occur. Automatic coverage would reduce the administrative burden of having to assess these extensions.
- Extensions to transmission pipelines should also be automatically covered. However, the service provider would be able to apply to the NCC to revoke coverage of that extension.

Consistent with the AEMC's draft report, the ERA considered that the NCC, and not the regulator, is best placed to make coverage decisions. It views that there should be a clear separation between the body that determines the form of regulation and the body that applies the regulation.¹³⁶

4.3.3 Commission analysis

The Commission considers that the application of an access arrangement to transmission pipeline extensions is more complex than to expansions. By virtue of its different geographic reach:

¹³² Submissions to the draft report: ACCC, p. 7; AGL, p. 1; PIAC, p. 7.

¹³³ ATCO, submission to the draft report, p.5.

¹³⁴ MEU, submission to the draft report, pp. 12-13.

¹³⁵ ERA, submission to the draft report, p. 2.

¹³⁶ *ibid.*, p. 1.

- A pipeline extension may face a different market landscape than the pipeline itself. For example, a pipeline may transport gas to a town with a variety of end users while an extension to the pipeline may be built to service a gas fired generator or mine. In this case, the pipeline and the extension may have different degrees of market power, different risks reflecting the different end use customers, different vertical integration issues and potentially different competitors. Inclusion of the extension in the access arrangement should be considered in light of the particular circumstances.
- A pipeline extension may face the same market landscape as the pipeline itself. For example, an extension to a new site of an existing customer for which there was no competition from other parties or from self-supply would enjoy the same market power as the pipeline. In this case, inclusion in the same access arrangement could be appropriate.

For these reasons, the Commission does not consider that the ERA's suggestion of automatic coverage of extensions, even with a potential for revocation by the NCC, is a suitable arrangement to place in the NGR.¹³⁷ Moreover, the NGR does not prevent such an approach being part of an access arrangement's extension requirements.

In response to ERA's submission that the regulator should not be involved in assessing whether extensions should be covered, the Commission notes that the regulator already decides whether to approve the access arrangement's extension requirements and has the discretion to define the governance and criteria for extension coverage.¹³⁸ The NGR do not require the extension requirements in an access arrangement to make any reference to the coverage criteria. Subsequent decisions regarding extensions are then made according to the regulator-approved requirements in the access arrangement.

In response to the MEU's submission that the regulator should have the discretion to override the decision of a service provider to not include an extension in the access arrangement, the Commission also considers that this is covered by the regulator's discretion to specify access arrangement requirements in relation to extensions and subsequently assess them.¹³⁹

The Commission does not consider it necessary to apply different requirements to transmission and distribution pipelines. The NGR requirements are sufficiently flexible to allow for different arrangements in extension requirements of access arrangements to be approved by the regulator where that satisfies the NGO.

In practice, most extensions to covered distribution pipelines are likely to continue to be included in the access arrangement as they are approved to be conforming capital expenditure. Such arrangements appear to be appropriate for the nature of capital expenditure for distribution pipelines and the methodology employed to calculate reference tariffs.

However, there may be scenarios where this is not in the long term interest of consumers. Nevertheless, this does not require any amendment to the NGR. The

¹³⁷ *ibid.*, p. 2.

¹³⁸ ERA, submission to the draft report, p. 1.

¹³⁹ MEU, submission to the draft report, pp. 12-13.

approach specified in the final recommendation allows these extensions to be assessed on a case by case basis if the regulator considers it appropriate to approve extension requirements in an access arrangement that provide for this to occur.

In conclusion, the Commission has decided that the question of whether a new extension should be included in a pipeline's access arrangement should continue to be resolved on a case by case basis according to the approved policy of the access arrangement itself. As a result, the Commission recommends the retention of extension requirements in access arrangements for new extensions. It makes no other recommendations to change these NGR provisions.

For existing uncovered extensions to covered pipelines, two options should be available:

- the service provider can propose to include the extension as part of the covered pipeline at the time the access arrangement is next revised¹⁴⁰
- if an extension is not included in the access arrangement, then a third party can submit to the NCC an application for coverage of the extension. If covered, a form of regulation test could then determine which form of regulation should apply.¹⁴¹

The recommended approach for extensions differs to that for expansions. It retains a significant degree of discretion for service providers to propose, and for the regulator to approve, extension requirements for an access arrangement. As discussed above, this discretion is required to enable regulators to make decisions that are consistent with the NGO for the various circumstances that may arise.

The recommended approach is summarised in Table 4.3.

¹⁴⁰ While an existing extension can be added to an access arrangement, the NGR only allows capital expenditure from the current access arrangement period to be added to the capital base. Changes to the NGR will be required to allow older capital expenditure to be added to the capital base. These changes are discussed in Chapter 7.

¹⁴¹ This option is currently available. It does not require a change to the NGR or NGL. From a regulatory perspective, the extension would be treated as a separate covered pipeline. However, under rule 53 of the NGR, access arrangements can be consolidated by direction of the regulator.

Table 4.3 Recommended approach for extensions

Form of regulation applied to pipeline	Coverage of existing extension	Coverage of new extension
<p>Full regulation Light regulation - with limited access arrangement</p>	<p>An existing extension included in the current access arrangement will remain included and be treated as part of the covered pipeline. The form of regulation applied to the pipeline applies to the extension.</p> <p>An existing extension that is not included in the current access arrangement:</p> <ul style="list-style-type: none"> • may be included in the access arrangement from the next access arrangement period if sought by the service provider and approved by the regulator. The form of regulation applied to the pipeline will apply to the extension. • may become a covered pipeline as the result of a successful coverage application by the service provider or a third party. 	<p>A new extension:</p> <ul style="list-style-type: none"> • may be included in the access arrangement if sought by the service provider and approved by the regulator under the access arrangement's extension requirements. The form of regulation applied to the pipeline will apply to the extension. • may become a covered pipeline as the result of a successful coverage application by the service provider or a third party.
<p>Light regulation - no limited access arrangement</p>	<p>An existing extension that is treated as part of the covered pipeline will remain treated as part of that pipeline. Light regulation applies to the extension.</p> <p>An existing extension that the regulator has determined to not be treated as part of the covered pipeline will remain as such. A third party can then submit an application to the NCC to cover the extension.</p>	<p>A new extension will be treated as part of the covered pipeline and light regulation will apply to that extension, unless the regulator determines that the extension should not be part of the covered pipeline. A third party can then submit an application to the NCC to cover the extension.</p>
<p>Non-scheme pipeline</p>	<p>Part 23 applies to existing extensions of the pipeline.</p>	<p>Part 23 applies to new extensions of the pipeline.</p>

The Commission considers that extensions should continue to be treated on a case by case basis, as they may constitute laterals that face sufficiently different market landscapes from the pipelines themselves. Additional flexibility is provided by permitting existing extensions to also be included as part of a covered pipeline. This approach promotes efficiency in balancing the cost and benefit of regulation in each case. The Commission considers that this fit for purpose approach to the development of extension requirements for an access arrangement is consistent with the NGO. It provides the opportunity for clarity to be provided to pipeline investors, service providers and users on the treatment of extensions and the potential impact on

reference tariffs for a specific pipeline. Extension requirements specified in this way will support well informed decision making on investment in, and use of, a pipeline.

4.3.4 Final recommendation

Recommendation 4: Enable existing extensions to be included in access arrangements

Amend the NGR to permit a service provider to seek an existing extension to a scheme pipeline be included in the relevant access arrangement.

The proposed amendments are reflected in proposed transitional rules in the NGR.

5 Reference services

Box 5.1 Summary of findings and recommendations

Full access arrangements are the defining feature of the economic regulatory framework for full regulation pipelines under the NGL and NGR. Tariff and non-tariff terms and conditions of access to all services on full regulation pipelines are regulated by reference to reference services. As a result, the reference services included in an access arrangement are the key to the success in applying economic regulation to the services of the pipeline.

Determining the appropriate number of reference services, and what those reference services should be is a trade-off between:

- the benefits that reference services provide to prospective users
- the cost and regulatory burden of ex ante determining reference services and corresponding reference tariffs and non-tariff terms and conditions.

However, the NGR are not worded sufficiently to guide the regulator in making the cost-benefit trade-off when determining the number and type of reference services. Consequently, the Commission considers that the test for specifying pipeline services as reference services should be changed so that the regulator would have regard to a number of factors in order to determine reference services.

The Commission has also found that there are a number of ambiguities in the definition of pipeline services, reference services and the intent of related provisions. The Commission has recommended changes to the NGR in order to reduce these ambiguities.

Finally, the Commission considers that the current access arrangement process does not provide sufficient time to consider, consult on and determine reference services. Consequently, it recommends a new reference service setting process. This will improve the prospect of the regulator determining the appropriate number and type of reference services in response to a service provider's proposal. It will also better enable pipeline users (who are the users of reference services) and other stakeholders to engage with and inform the reference service setting process.

The reference service is the cornerstone of the full access arrangement, which is the defining feature of the economic regulatory framework for full regulation pipelines under the NGL and NGR. The reference service performs the following functions:

- the statement of reference service sets the parameters of the service and is the starting point of the access arrangement, and this is covered in this chapter
- the reference service provides the basis for full access arrangement tariff and non-tariff reference terms and conditions (Chapter 6), efficient cost and revenue requirements and cost allocation (Chapter 7)
- full access arrangements aid negotiations (Chapter 8) and arbitration (Chapter 9).

This chapter sets out the current framework, discusses key issues and makes recommendations with regard to the:

- approach to determining reference services
- process for determining reference services.

5.1 Approach to determining reference services

5.1.1 Current framework

Reference services and full access arrangements are the defining feature of full regulation under the NGL and NGR. Pipelines subject to light regulation or the access regime for non-scheme pipelines do not have reference services. For each reference service provided by a full regulation pipeline, a reference tariff and reference terms and conditions are proposed by the service provider and approved by the regulator. They are set out in the full access arrangement.

Section 2 of the NGL defines a reference service as:

“a pipeline service specified by, or determined or approved by the AER under, the Rules as a reference service.”

Section 2 of the NGL defines a pipeline service as follows:

“pipeline service means –

(a) a service provided by means of a pipeline, including –

(i) a haulage service (such as firm haulage, interruptible haulage, spot haulage and backhaul); and

(ii) a service providing for, or facilitating, the interconnection of pipelines; and

(b) a service ancillary to the provision of a service referred to in paragraph (a),

but does not include the production, sale or purchase of natural gas or processable gas.”

Rule 48 of the NGR states that:

“(1) A full access arrangement must: ...

(a) describe the pipeline services the service provider proposes to offer to provide by means of the pipeline; and

(b) specify the reference services; and

(c) specify for each reference service; and

(d) the reference tariff; and

(e) the other terms and conditions on which the reference service will be provided.”

In addition, rule 101 of the NGR states that a full access arrangement must contain a statement of reference services, and provides the basis on which reference services are determined in full access arrangements:

“(1) A full access arrangement must specify as a reference service:

(a) at least one pipeline service that is likely to be sought by a significant part of the market; and

(b) any other pipeline service that is likely to be sought by a significant part of the market and which the AER considers should be specified as a reference service.

(2) In deciding whether to specify a pipeline service as a reference service, the AER must take into account the revenue and pricing principles.”

It should be noted that service providers and users are not limited to contracting only for a reference service. Section 322 of the NGL states that a service provider can enter into an agreement with a user or prospective user for access to the pipeline under terms and conditions that are different from the applicable access arrangement.

5.1.2 Summary of draft report findings and draft recommendations

Reference services serve as the basis for access negotiations, and act to constrain the use of market power by service providers. However, most access arrangements for transmission pipelines to date contain a single reference service, typically firm forward haul. In some cases, this reference service may not provide a useful basis for negotiations for other pipeline services, such as backhaul, as available, storage, or park and loan.

The Commission concluded that the inclusion of additional reference services in an access arrangement may place further limits on a service provider's use of its market power by assisting users and prospective users in negotiation and arbitration.

It also noted that determining an appropriate set of reference services is a trade-off between:

- The benefits that reference services provide to prospective users. A reference service acts as an aid to the negotiation process, by narrowing the points of contention and providing greater predictability of the outcomes of any arbitration. In turn, this should constrain the use of market power of a service provider in its negotiations, reduce the prospect of negotiation leading to arbitration, and reduce the cost of arbitration in the event that it is necessary
- The cost and regulatory burden of the ex ante determination of reference services and corresponding reference tariff and non-tariff terms and conditions (for the service provider, the regulator and other stakeholders through the access arrangement assessment process).

However, this trade-off is not explicitly recognised in the NGR. As a result, it does not provide sufficient guidance to the regulator in making this trade-off when deciding on the reference services for an access arrangement.

As a consequence, the Commission concluded that the test for specifying pipeline services as reference services should be changed so the regulator can assess proposed reference services against a list of criteria that reflect the above trade-off (see draft recommendation 6 reproduced below).

The Commission also found that there are a number of ambiguities in the definition of pipeline services and reference services, and the intent of related provisions, particularly in relation to:

- the relationship between pipeline services and reference services
- the degree of specificity required to describe or identify a pipeline service and a reference service
- the purpose of the reference service.

The Commission recommended changes to the NGR in order reduce these ambiguities and provide clarity and guidance on the intent of the provisions (see draft recommendations 4 and 5 below).

Draft recommendation 4: Clarify the requirements for defining pipeline services

To amend the definition of pipeline service in the NGL and the requirement to describe pipeline services in an access arrangement under the NGR. Specifically, amendments should require that:

- a pipeline service is to be stated or identified in terms of parameters such as type, location and priority (firmness of service), consistent with the provisions for the distinction between pipeline services under rule 549(3) of the NGR for non-scheme pipelines
- the service provider of a covered pipeline is to provide, as part of an access arrangement proposal, a full list of available and potential pipeline services. This list of pipeline services can be referenced to existing gas transportation agreements for that pipeline.

Draft recommendation 5: Clarify the requirements for defining reference services

To amend the NGL and NGR in order to:

- clarify the purpose of the reference service
- set out the parameters that must be included in a statement of a reference service, which may include:
 - clarifying what the statement of reference service required by rule 101 of the NGR should contain, considering the amendments to the definition of pipeline service
 - moving rule 101 to Division 4 of the NGR in order to clarify the interaction between rules 48 and 101 and create a clear, chronological process for the specification of reference services.

Draft recommendation 6: Update the test for determining a reference service

To amend the NGR in order to require the regulator to determine one or more pipeline services to be reference services, having regard to the following criteria:

- historical and forecast demand for the service and the number of prospective users
- the extent to which the service is substitutable with other pipeline services
- the feasibility of allocating costs to the service
- the usefulness of the service in supporting access negotiations.

5.1.3 Stakeholder submissions to draft report

Users and user representatives supported the Commission's draft recommendations to improve the definition of pipeline and reference services and the amendment of the test for determining reference services.¹⁴² In its submission, PIAC highlighted concerns with the current framework, stating that it is not clear how the broad requirement to define pipeline services can be effectively translated into specific reference services that aid negotiations.¹⁴³ EnergyAustralia noted that "when reference prices are set through a regulatory process, retailers can have confidence that prices are reasonable and can seek to negotiate alternative prices for specific services."¹⁴⁴

AGIG also supported the inclusion of reference service criteria in the NGR, but cautioned against requiring the statement of pipeline services to identify all "potential pipeline services."¹⁴⁵ This point was raised in a number of service provider submissions, where these stakeholders recommended that the statement of pipeline services should be limited to those services that are currently available on the pipeline, rather than all the potential services that could be available on the pipeline.¹⁴⁶ In particular, AGIG noted that listing low volume or unique service offerings is unlikely to be in the interest of AGIG customers.¹⁴⁷

APA expressed concern that the proposed change could make it difficult for the service provider to challenge the inclusion of a particular reference service in its access arrangement, particularly where that service is sought by a large industrial user. However, APA also noted that the recommended changes are not beyond the current powers of the regulator.¹⁴⁸

ATCO suggested further consideration of draft recommendations 4 to 6 is required to specifically address the differences between gas distribution and transmission pipelines.¹⁴⁹

The ACCC, AER and ERA expressed support for changes to the NGR that clarify pipeline and reference service definitions and provide better guidance for regulators

¹⁴² Submissions to the draft report: PIAC, p. 8; MEU, pp. 13-14; EUAA, p. 1; EnergyAustralia, p. 1; AGL, p. 1.

¹⁴³ PIAC, submission to the draft report, p. 8.

¹⁴⁴ EnergyAustralia, submission to the draft report, p. 1.

¹⁴⁵ AGIG, submission to the draft report, p. 2.

¹⁴⁶ Submissions to the draft report: AGIG, p. 2; APGA, p. 2; Jemena, p. 3;

¹⁴⁷ AGIG, submission to the draft report, p. 2.

¹⁴⁸ APA, submission to the draft report, pp. 26-27.

¹⁴⁹ ATCO, submission to the draft report, p. 5.

when assessing reference services.¹⁵⁰ While the ACCC and AER generally supported the inclusion of reference service criterion in the NGR, both expressed concern about the usefulness and workability of the cost allocation criteria in the draft recommendation.¹⁵¹ In particular, the ACCC noted that it:¹⁵²

“... does not believe the feasibility of allocating costs to reference services should be a limb of the reference service test. Particularly as interruptible and as available services are typically priced as a function of the forward haul tariff, with the discount or premium reflecting other factors such as the opportunity costs of providing the service.”

In subsequent discussions with the AER and ACCC, both have indicated support for retaining the cost allocation criterion in the reference service test (see section 4.1.4).¹⁵³

5.1.4 Commission analysis

Policy intent of reference services

As discussed in Chapter 3, a prospective user that seeks the reference service at the reference terms and conditions can refer to the reference tariff in access negotiations. Consequently, a reference tariff directly constrains the use of market power of a service provider in the provision of the reference service. Moreover, the determination of a reference tariff through a transparent access arrangement process by a regulator assists parties that are seeking access to the reference service or similar services in their negotiations or in arbitration.

A reference service defines a specific service offered by a service provider, in respect of which the regulator has approved tariff and non-tariff terms and conditions. Subject to capacity constraints, a service provider must offer its reference services to any user or prospective user. The user can accept the reference service and reference tariffs, or non-tariff terms and conditions, or negotiate for different services, tariff and non-tariff terms and conditions.

The access arrangement provides a starting point for negotiation and arbitration:

- If access negotiations for a reference service fail and dispute resolution follows, then s. 189 of the NGL requires that the access arrangement applies.¹⁵⁴
- In the case that a prospective user seeks a service that differs only slightly from the reference service, then the reference service would provide a good basis for the negotiation and arbitration processes. In this case, an arbitrator may only need to determine the marginal change in cost of the change to the non-tariff terms and

¹⁵⁰ Submissions to the draft report: ACCC, p. 6; AER, Attachment p. 1; ERA, p. 7.

¹⁵¹ Submissions to the draft report: ACCC, p. 6; AER, Attachment p. 1.

¹⁵² ACCC, submission to the draft report, p. 6.

¹⁵³ Over the course of this review the AEMC held biweekly teleconferences with ACCC, AER, ERA and GMRG in which policy and recommendations were discussed.

¹⁵⁴ Section 189 of the NGL states the dispute resolution body must give effect to the access arrangement when making an access determination.

conditions - as opposed to determining the appropriate tariff from first principles.¹⁵⁵

- In the case that a prospective user seeks a service that differs substantially from the reference service, then the reference service may provide only limited information to support the negotiation process. Consequently, there would be greater uncertainty in both the negotiation and arbitration processes.

Not all services in which a service provider may have market power have to be reference services.¹⁵⁶ A reference service acts as an aid to the negotiation process, by narrowing the points of contention and providing greater predictability of the outcomes of any arbitration. In turn, this should reduce the prospect of negotiation leading to arbitration, and reduce the cost of arbitration in the event that it is necessary. To be clear, services that are not reference services (including all services on light regulation pipelines) are still subject to economic regulation through information provision and binding arbitration (if required).

The Commission does not recommend any changes to the policy intent of reference services, as described above. However, it does recommend a set of changes that would better align the NGL and NGR provisions in relation to the determination of reference services with the policy intent.

Definition of pipeline services and reference services

The definition of pipeline services in the NGL¹⁵⁷ and the description of pipeline services in an access arrangement in the NGR¹⁵⁸ could be interpreted by a service provider in one of two ways:

- that the access arrangement needs only to include a description of the services that the pipeline proposes to offer
- that the access arrangement should set out a list of all of the services that the pipeline offers or can offer and that a user or prospective user can seek access to.

This suggests that different levels of specificity used in describing pipeline services in an access arrangement may equally satisfy the requirements of the NGR. For example, a pipeline service could be described or identified:

- relatively broadly, such as firm forward haul, or
- more specifically, such as firm forward haul between points A and B.

The AER and ERA indicated in discussions with the AEMC that covered pipeline service providers tend to only provide a general description of services on the pipeline as part of an access arrangement proposal. Service providers have not provided a more

¹⁵⁵ The service provider may still decide to offer the service at a tariff equal to the reference tariff under some minor variations to the reference terms and conditions.

¹⁵⁶ Rule 101 of the NGR only requires “at least one” reference service to be specified in the access arrangement. The regulator has full discretion (noting the significant part of the market test) to require that the service provider specify more reference services.

¹⁵⁷ Section 2 of the NGL.

¹⁵⁸ Rule 48 of the NGR.

detailed list of pipeline services in response to rule 48. Additionally, the regulators themselves have not required such a list from service providers.

As noted above, the NGR require a reference service to be a pipeline service that is likely to be sought by a significant part of the market.¹⁵⁹ Under the current framework, if a pipeline service is broadly defined (for example, firm forward haul), then it is not clear how a reference service should be subsequently described or identified so that it is relevant to contract negotiations. One option may be that a reference service is to be a specific service within the broadly defined pipeline service (suggesting that pipeline service is more like a type of service). Another option would be that the pipeline service and reference service are the same service. In this case, if a relatively broadly defined pipeline service is likely to be sought by a significant part of the market, then this may be specified as a reference service. As such, a pipeline service and reference service may not be distinguishable (except that a pipeline service is only specified as a reference service if likely to be sought by a significant part of the market). However, this outcome raises the question of whether a reference service defined or described in a broad way is a useful reference point for contract negotiations.

In considering which of these options is more appropriate, it should be noted that the NGR do not:

- set out the purpose of the reference service, in order to better guide the service provider and regulator on identifying which pipeline services should be reference services
- distinguish the statement or identification of what a reference service is from the more detailed terms and conditions on which the service is provided.

Rule 101 of the NGR requires a 'statement of reference service' without clarifying what is to be included in such a statement, nor its purpose. For example, it is not clear whether the detail of entry and delivery points is part of the statement of a reference service or a term and condition relevant to the reference service.¹⁶⁰

All of these elements indicate that overall, there is currently a lack of clarity and guidance provided in the NGL and NGR for service providers and regulators on:

- the relationship between pipeline services and reference services
- the degree of specificity required to describe or identify a pipeline service and a reference service
- the purpose of the reference service.

As suggested by APA in its submission to the draft report, the current framework may be able to achieve the policy intent that access arrangements include reference services for pipeline services that are likely to be sought by users and prospective users.¹⁶¹ However, given stakeholder concerns and general support for the Commission's draft recommendations, the application of the rules in practice, and the above analysis, the

¹⁵⁹ Rule 101 of the NGR.

¹⁶⁰ Note that a distinction can generally be made between what the reference service is and the terms and conditions on which the service is provided. See the wording in rule 48(1)(c) and (d) of the NGR.

¹⁶¹ APA, submission to draft report, pp. 26-27.

Commission considers that the current framework would benefit from clarification because:¹⁶²

- The definition of pipeline services in the NGL may be interpreted either broadly or narrowly by service providers, and the reference in the NGR to the access arrangement including a description of pipeline services may be ambiguous. The regulator, users and prospective users may not have a full understanding of the pipeline services that are or can be offered by a pipeline. Users and prospective users may not know all the services on the pipeline that they can seek access to, or from which one or more reference services can be determined
- The current definition of reference service in the NGL and its application in the NGR is ambiguous, in that there is no stated purpose of the reference service. Users and prospective users may not engage effectively in the reference service determination without the purpose of reference services being set out in the NGR as a guide.
- The NGR refer to a 'statement of reference service' without clarifying what is to be included in such a statement. Determined reference services may be too broadly defined so as to be less useful as a benchmark for tariff negotiations.

Together, these issues create uncertainty around both negotiation and arbitration. This may provide the opportunity (or perceived opportunity) for service providers to exploit any market power by charging monopoly prices for services that cannot be benchmarked against a reference service.

The Commission notes that Part 23 of the NGR (the access regime for non-scheme pipelines) has sought to address the application of the definition of pipeline service through the following provisions:¹⁶³

“(3) For the purposes of this Part, a pipeline service is to be treated as distinct from another pipeline service having regard to matters including service type (for example, forward haul, backhaul, park and loan) and the priority of the service relative to other pipeline services of the same type.

(4) For the purposes of this Part, in relation to a prospective user, a pipeline service is also to be treated as distinct from another pipeline service having regard to the service term and the capacity sought by the prospective user.”

Part 23 also provides clarity in relation to pipeline service information:¹⁶⁴

“(3) The pipeline service information for a pipeline comprises a list of the pipeline services available on the pipeline and for each pipeline service:

(a) a description of the service and any locational limitations on availability;
and

¹⁶² Submissions to the issues paper: MEU, p. 16; ACCC, p. 3; AER, p. 18; PIAC, pp. 5, 34; AEMO, p. 2. Submissions to the draft report: ACCC, p. 6; AER, Attachment p. 1; ERA, p. 7; AGIG, p. 2; PIAC, p. 8; MEU, pp. 13-14; EUAA, p. 1; EnergyAustralia, p. 1; AGL, p. 1.

¹⁶³ Rule 549 of the NGR.

¹⁶⁴ Rule 553 of the NGR.

(b) the priority ranking of the service in relation to the other pipeline services including when scheduling and in the event of curtailment.””

Having considered the issues noted above and the approach under Part 23, the Commission has concluded that amendments to the relevant pipeline and reference service definitions should be made. In submissions to the draft report, service providers considered that a statement of pipeline services should be limited to those services that are available on the pipeline rather than including "potential" services. The Commission acknowledges that a list of "potential" pipeline services could be interpreted as is infinite and may result in the provision of an overwhelming catalogue of services, many of which would unlikely to ever be sought by users. The production and subsequent assessment of such a list would likely serve to increase the regulatory burden on service providers, regulators, users and other stakeholders.

For this reason, the Commission has modified its recommendation so that a pipeline service provider is required to provide a list of the pipeline services that are available on the pipeline (rather than available and potential services as proposed in the draft recommendation). The list would include services that a service provider may not currently offer, but may be the subject of discussions (past or continuing) with prospective users or that it can reasonably provide, if requested. The consultation periods in the reference service and access arrangement processes provide an additional opportunity for users to seek pipeline services. The Commission further modified its recommendation to remove the amendment of the definition of pipeline and reference services in the NGL. The Commission considers that the necessary clarity will be achieved by providing additional guidance in the NGR on the requirements used to define pipeline and reference services, particularly for the following:

- the service provider in proposing reference services and list of pipeline services
- regulators in the determination of reference services
- users and prospective users in understanding reference services, effectively engaging in the access arrangement review process and negotiating tariffs in reference to reference tariffs
- the access arrangement in defining a reference tariff and reference terms and conditions that can be attributed to a distinct service.

These amendments will facilitate inclusion of additional reference services in an access arrangement. Additional reference services should act to limit a service provider's use of its market power by assisting users and prospective users in negotiation and arbitration. This, in turn, is expected to contribute to the achievement of the NGR by promoting access to and the efficient pricing of pipeline services.

Test for determining reference services

A number of stakeholders raised concerns that rule 101 of the NGR does not effectively constrain a service provider using its monopoly power.¹⁶⁵

Specifically, some stakeholders were concerned that because a reference service must be a “service that is likely to be sought by a significant part of the market,”¹⁶⁶ services that

¹⁶⁵ Submissions to the issues paper: MEU, p. 16; ACCC, p. 3; AER, p. 18; PIAC, pp. 5, 34; AEMO, p. 2.

are not sought by a significant part of the market and in respect of which the service provider has market power would not be likely to be specified as reference services. For example, a specific pipeline service may be sought by a large industrial user. Despite the market power that the service provider may have in this scenario, a service required by a single user may not meet the requirement that the service is likely to be sought by a significant part of the market. If so, such a service would not be a reference service.

Stakeholders also raised concerns that rule 101 does not require a reference service for each type of service. For example, if pipeline services were defined as firm forward haul and park and loan,¹⁶⁷ then (according to some stakeholders) there should be a reference service for both of these types or categories of pipeline services.

In light of the policy intent of reference services and these concerns, the Commission considers that determining an appropriate set of reference services, and what those reference services should be, is a trade-off between:

- the benefits that reference services provide to prospective users¹⁶⁸
- the cost and regulatory burden of an ex ante determination of reference services for an access arrangement.¹⁶⁹

It is therefore not appropriate that every service for which the pipeline owner has market power be a reference service. This would significantly increase the cost and regulatory burden of determining reference services and corresponding reference tariff and non-tariff terms and conditions, while only providing limited benefit. However, if a service is not a reference service, this does not mean that there is a no regulatory oversight for that service. Any non-reference service that is provided by a covered pipeline is economically regulated because the service provider of the pipeline is subject to information provision obligations; a negotiation framework; and binding arbitration should negotiations prove unsuccessful.

However, rule 101 is not explicitly worded to guide the regulator in making the cost-benefit trade-off required to determine the number and type of reference services relevant to an access arrangement. The Commission considers that this issue can be addressed by amending the test for specifying pipeline services as reference services so that the regulator would have regard to a number of factors in order to determine reference services. The reference service factors should be:

¹⁶⁶ Rule 101 of the NGR.

¹⁶⁷ As compared to imbalances that may accrue on other pipeline services due to forecasting error or arise due to supply or demand interruptions, park and loan services allow the shipper to nominate to either temporarily borrow (loan) gas from the pipeline owner (depleting the linepack of the pipeline) or temporarily deposit (park) gas in the pipeline (increasing the line pack). Park and loan services generally provide that the gas be parked at a receipt point and delivered at the same receipt point or an adjacent delivery point, and do not entitle the user to transport that gas.

¹⁶⁸ The benefits of an appropriate set of reference services include: aiding the negotiation process, narrowing the scope of contention, reducing negotiation costs, reducing the prospect of arbitration and reducing the cost of arbitration (should it be required).

¹⁶⁹ This includes the cost and regulatory burden for service providers, the regulator and other stakeholders of determining reference services and corresponding reference tariff and non-tariff terms and conditions.

- Actual and forecast demand for the service and the number of prospective users: Services with historical or forecast high demand are likely to be useful to a larger number of users and prospective users. Consequently, the benefits of making such services reference services are likely to be relatively high. Conversely, for rarely demanded services, the cost of an ex ante determination of the reference service and reference tariff and non-tariff terms and conditions may be relatively high. Should a user or prospective user and service provider be unable to negotiate access for such a service, the tariff and non-tariff terms and conditions for the service would be determined at that time through arbitration. As a result, direct regulatory costs are only incurred in the less likely event of the service being brought to arbitration.
- The extent to which the service is substitutable with other pipeline services: Multiple substitutable reference services increase the regulatory burden for little additional benefit. Instead, only one service of a group of services may be specified as the reference service if this service provides a sufficiently good basis to aid the negotiation process for all other services that can be substituted with it. Conversely, two services that are not substitutable are each unlikely to be useful reference points for one another in the negotiation process. As such, it may be appropriate for both to be reference services.
- The feasibility of allocating costs to the pipeline service: Identifying the cost of providing a reference service and allocating it to the service enables the regulator to determine a meaningful reference tariff. A meaningful reference tariff and tariffs negotiated or arbitrated by reference to it reduces inefficiencies such as the under-utilisation of, or under-investment in, pipelines. It is also consistent with the cost allocation requirements set out in rule 93 of the NGR. Therefore, a reasonable prospect of allocating costs to the service in a manner that satisfies the NGL and NGR should be a reference service factor.
- The usefulness of the service in supporting access negotiations and dispute resolution for other pipeline services: Reference services assist access negotiations by narrowing the points of contention and providing greater predictability of the outcomes of any arbitration. By replacing services sought by a "significant part of the market" with a test of usefulness in supporting negotiations, regulators have discretion to consider whether the reference service will assist multiple users seeking similar or the same service on the pipeline
- The likely regulatory cost for all parties in specifying the pipeline service as a reference service.

In response to the Commission's draft report, both the ACCC and AER highlighted concerns about the usefulness and workability of the "feasibility of allocating costs to service" factor. The ACCC and AER noted that interruptible, as available services and back haul services are typically priced as a function of the forward haul tariff with a discount or premium reflecting other factors such as the opportunity costs of providing the service.¹⁷⁰ The Commission has clarified that its final recommendation is that the regulator to "have regard" to the above factors when making its reference service

¹⁷⁰ Submissions to draft report: ACCC, p. 6; AER, Attachment p. 1.

proposal decision. Under the current provisions of the NGL, the regulator must also take into account the revenue and pricing principles when making a decision on reference services as well as the NGO.¹⁷¹

The Commission also expects the inclusion of these factors in the NGR will address the concern that each "type" of pipeline service should be a reference service, but only to the extent that doing so represents an appropriate trade-off against the regulatory burden of determining reference service and reference tariffs. For example, were firm forward haul and park and loan services considered by the regulator to have a low degree of substitutability then it may (depending on the other factors) determine both to be reference services.

ATCO suggested that services such as backhaul, and park and loan, are not typically provided by distribution pipelines, and as such the draft recommended changes to the reference service definition framework may be inappropriate. The Commission considers that the factors listed above allow for the appropriate consideration of the differences between distribution and transmission pipelines. If demand for certain services is low, and/or the services are unlikely to be useful in supporting access negotiations and dispute resolution for other pipeline services, then it is unlikely that the regulator would determine these services to be reference services. In this way, the reference service framework recommended is fit for purpose for both distribution and transmission pipelines.

The Commission expects that its final recommendations will benefit regulators, users, prospective users and consumers by:

- providing transparency about the availability and potential availability of pipeline services
- specifying appropriate reference services in an access arrangement to guide negotiation and arbitration.

These improvements are expected to balance the cost of determining reference services and reference tariff and non-tariff terms and conditions (that are ultimately borne by consumers) with the benefits of reference services in aiding negotiation and arbitration on pipeline services.

5.1.5 Final recommendations

Recommendation 5: Clarify the requirements for describing pipeline services

Introduce a requirement to describe pipeline services in an access arrangement such that:

- a pipeline service is to be stated or identified in terms of parameters including type, location and priority (firmness of service), consistent with the provisions for the distinction between pipeline services under rule 549(3) of the NGR for non-scheme pipelines

¹⁷¹ The reference service proposal decision is an exercise of the AER's regulatory function or power under s. 28 of the NGL, as such the regulators must have regard to the revenue and pricing principles and the NGO in making the decision.

- the service provider of a covered pipeline is to provide, as part of an access arrangement proposal, a full list of available pipeline services. This list of pipeline services can be referenced to existing gas transportation agreements for that pipeline.

The proposed amendments are reflected in the drafting of new rule 47A.

Recommendation 6: Clarify the requirements for describing a reference service

Specify that the reference service proposal must be drawn from the list of pipeline services and must be described having regard to the reference service factors.

The proposed amendments are reflected in the drafting of new rule 47A and the amendments to rule 48 and the proposed omission of rule 101.

Recommendation 7: Update the test for determining a reference service

Require the regulator to determine one or more pipeline services to be reference services, having regard to the following factors:

- actual and forecast demand for the pipeline service and the number of prospective users of the service
- the extent to which the service is substitutable with other pipeline services
- the feasibility of allocating costs to the pipeline service
- the usefulness of specifying the service as a reference service in supporting access negotiations and dispute resolution for other pipeline services, by providing a point of reference or benchmark for:
 - negotiating access
 - tariffs
 - terms and conditions
- the likely regulatory cost for all parties in specifying the pipeline service as a reference service.

The proposed amendments are reflected in the drafting of new rule 47A, amendments to rule 48 and the proposed omission of rule 101.

5.2 Process for determining reference services

5.2.1 Current framework

The NGR require full regulation pipeline service providers to submit to the regulator, for approval, a full access arrangement proposal or a full access arrangement revision proposal.¹⁷²

The regulator assesses the access arrangement proposal under Part 8 to 11 of the NGR. The regulator seeks submissions on the proposal, issues a draft decision for consultation, and then makes a final decision to approve or refuse to approve the access arrangement proposal. Prior to submitting the access arrangement proposal, a service

¹⁷² Access arrangement proposal refers to the initial access arrangement. Access arrangements are then periodically revised. Access arrangements generally do not expire.

provider may request a pre-submission conference in order to discuss questions affecting the proper formulation of the proposal.¹⁷³

If the regulator approves the access arrangement proposal, it approves all elements in the proposal, including the non-price terms and conditions on which the reference service will be provided.¹⁷⁴

Rule 62(7) of the NGR states that the regulator must make an access arrangement final decision within six months of receiving the proposal, and rule 62(8) states that this time cannot be extended by more than two months.¹⁷⁵ The regulator will "stop the clock" in the decision making timeframe when additional information or consultation is required.¹⁷⁶ Rule 13(1) gives an absolute overall time limit of 13 months between the date that the service provider submits a full access arrangement proposal and the date that the regulator makes a final decision.

5.2.2 Summary of draft report findings and draft recommendations

Following consideration of the issues raised by stakeholders in relation to the setting of reference services, the Commission concluded in the draft report that the introduction of an upfront reference service setting process (prior to the lodgement of the full access arrangement proposal) would support the introduction of additional reference services for full regulation pipelines. A new, specific reference setting service process would also assist with the implementation of the Commission's other reference service recommendations that:

- service providers submit to the regulator a list of all pipeline services that are or could be offered by the service provider on that pipeline
- service providers propose one or more reference services from the list of pipeline services
- the service provider's proposal and regulator's assessment is based on the recommended criteria for reference services.

The Commission's draft recommendation for a new reference service setting process included the following key elements:

- the process would commence 24 months before the access arrangement review submission date
- the process would take no more than six months
- the process would include at least one round of consultation
- the regulator's final decision on the reference services would be binding, unless there was a material change in circumstances.

The Commission also found that:

¹⁷³ Rule 57 of the NGR.

¹⁷⁴ Rule 41 of the NGR.

¹⁷⁵ However, it should be noted that under s. 332 of the NGL a regulator's decision made after the specified date is not an invalid decision.

¹⁷⁶ Rule 11 of the NGR; AER, Access arrangement guideline, March 2009, pp. 17-18.

- the introduction of an upfront reference service setting process would remove the need for the pre-submission conference provided by rule 57 of the NGR
- service providers should be provided with the flexibility to set the review submission date and revision commencement date for an access arrangement (with the approval of the regulator) (rule 50 of the NGR).

Draft recommendation 7: Introduce a reference service setting process

To amend the NGR in order to:

- introduce a fit for purpose process to determine the reference services to be provided by the service provider with the following key design elements:
 - the service provider submits to the regulator its full list of pipeline services and proposed reference services, based on the reference service criteria to be specified in the NGR
 - the process is four to six calendar months, with at least one round of consultation
 - the regulator's final decision on the reference services is guided by the reference service criteria and is binding on the access arrangement process, unless there is a material change in circumstances
- enable service providers to set a review submission date and revision commencement date, with the approval of the regulator (rule 50 of the NGR)
- remove the pre-submission conference (rule 57 of the NGR).

5.2.3 Stakeholder submissions to draft report

The Commission's draft recommendation to introduce a new reference service process in order to improve stakeholder engagement in the regulatory process received broad stakeholder support.¹⁷⁷

However, stakeholders did make some specific comments on the draft recommendations. Both the MEU and PIAC considered the AER should be required to define the common reference services that will be included in all access arrangements.¹⁷⁸ Further, PIAC suggested that the AER should produce a reference service definition guideline or approach paper that could be applied during the reference service process.¹⁷⁹ In addition, the MEU considered that end users and shippers should be allowed to nominate reference services in order to expand the number and usefulness of the reference services, thereby limiting the need for negotiation and arbitration.¹⁸⁰

¹⁷⁷ Submissions to the draft report: ACCC, p. 6; AER, Attachment p. 1; ERA, p. 7; MEU, pp. 13-14; PIAC, pp. 8-9; EUAA, p. 1; AGL, p. 1; EnergyAustralia, p. 1.

¹⁷⁸ Submissions to draft report: PIAC, p. 9; MEU, p. 13.

¹⁷⁹ PIAC, submission to the draft report, p. 9.

¹⁸⁰ MEU, submission to draft report, pp. 13-14.

In contrast, APA, AGIG and APGA considered the introduction of a reference service process to be unnecessary. In the event that the new process is implemented, these stakeholders considered that:

- the process should only be used when the service provider proposes a significant change in either the reference services, or reference terms and conditions¹⁸¹
- any decision by the regulator on the reference services should not be binding on service providers.¹⁸²

ATCO considered that while past consultation and engagement with stakeholders has been insufficient, current practices by service providers are much improved. It suggested that the draft recommendation to introduce a reference service setting process is likely to be duplicative of the extensive consultation and engagement process already undertaken, and would be more likely to add to, rather than mitigate, regulatory cost and complexity.¹⁸³

While it acknowledged the value of an upfront reference service process for transmission pipelines, Jemena considered that distribution pipelines should not be required to participate in such a process. Jemena noted that distribution pipelines provide fewer services than electricity networks and these services are also less likely to become contestable. Therefore, Jemena suggested that the recommended process, which it considered to mirror the current framework and approach phase of the AER's electricity revenue determination process, would be unnecessary.

Jemena also noted that in the event that the reference service setting process (and associated changes to the definitions of pipeline and reference service) is applied to distribution pipelines, transitional arrangements should be in place for its New South Wales distribution pipeline 2020-2025 access arrangement, which is due for submission to the AER in June 2019.¹⁸⁴

5.2.4 Commission analysis

Introducing a new process

Through the preparation of this report, a number of stakeholders (including the AER) raised the issue that the time period provided under the NGR is insufficient to fully consider, consult and decide on an access arrangement proposal. These stakeholders considered that this was a significant issue where there has been a material change to the:

- reference services offered (increased or varied reference services)
- non-tariff terms and conditions relevant to each reference service.

To address these concerns and in response to the interim report, the AER suggested the introduction of an upfront process, similar in concept to the framework and approach process under the NER (see Box 5.2). The AER suggested that an upfront process in the

¹⁸¹ AGIG, submission to the draft report, p. 2.

¹⁸² Submissions to the draft report: APA, pp. 27-28; AGIG, p. 2; APGA, p. 2.

¹⁸³ ATCO, submission to the draft report, p. 6.

¹⁸⁴ Jemena, submission to the draft report, pp. 4-5.

NGR could be used to determine the reference service, or suite of reference services, to be included in the service provider's access arrangement proposal.¹⁸⁵

Box 5.2 NER framework and approach process

The framework and approach process is the first step in the regulatory process used by the AER to determine and set efficient revenues for electricity distribution network services (clause 6.8.1(a) of the NER).

Through the framework and approach process, the AER assesses and proposes an approach on a range of matters, including:

- which services provided by the distribution network service provider will be regulated
- the form of regulation that should apply to each service
- service classification: direct control, negotiated or unclassified (unregulated)
- how incentives should be applied.

One of the benefits of the framework and approach process is that service classification decisions drive many other aspects of the subsequent distribution determination process. The distribution determination process can operate more efficiently if the AER has already made preliminary decisions on which services should be regulated and the form of regulation that should apply to those services.

The AER can depart from the framework and approach service classifications during the subsequent distribution revenue determination process (clause 6.12.3(b) of the NER) if there is a material change in circumstances that justifies the departure.

The Commission does not consider that the NER framework and approach process is fully suited to the economic regulation framework for full regulation pipelines. This is because the gas pipeline regulation regime is a negotiate-arbitrate regime that retains the flexibility for service providers, users and prospective users to negotiate commercial outcomes.

Nevertheless, the introduction of a preliminary process (prior to the lodgement of the full access arrangement proposal) that is restricted to the determination of reference services for full regulation pipelines would support the ability of the regulator, users and prospective users to introduce additional reference services where the service provider does not. This is important because the inclusion of additional reference services in an access arrangement is expected to address concerns about monopoly pricing by providing additional reference points (including tariff and non-tariff terms and conditions) on which to base access negotiations. Furthermore, while improvements to customer engagement may have made recently by some service providers, the inclusion of an upfront process to set reference services is expected to further improve customer engagement in the access arrangement assessment process.

¹⁸⁵ AER, submission to the issues paper, p. 19.

The Commission notes the COAG Energy Council is currently considering options for improving the resourcing available to consumer groups to support more effective engagement in the AER's processes to make revenue determinations and access arrangements under the national gas and electricity laws and rules.¹⁸⁶ In its submission to the COAG Energy Council, the AER noted the significant barriers to effective consumer engagement in access arrangements (and revenue determinations under the NER).¹⁸⁷ The AER's submission particularly highlighted its concern that consumers (generally through consumer representatives) have less capacity to participate and influence the outcomes of a regulatory process, resulting in a significant imbalance in the views and arguments presented to it.¹⁸⁸

The Commission considers that the introduction of the reference service process (and other recommendations to improve the access arrangement process, particularly in relation to consistent financial models and non-tariff terms and conditions) will assist users, prospective users and interested consumers and their representatives engage with the access arrangement process. Constructive engagement between service providers, the regulator, users and consumers increases the likelihood that the reference services will align with the long term interests of the consumer. The introduction of such a process is supported by the regulators, users and their representatives.¹⁸⁹

The Commission's final recommendation is largely unchanged from its draft recommendation to introduce into the NGR a process to specifically determine pipeline services and reference services that will be included in the subsequent access arrangement proposal.

Design of the reference service process

The draft report included a design of the recommended reference service process for stakeholder feedback. In considering this feedback, particularly from service providers and the regulators, the Commission has made some changes to its draft design.

The Commission's final recommendation includes the new reference service process commencing 24 months prior to the revision commencement date of the next access arrangement period for a pipeline. This start date balances the risk:

- that changes in circumstances mean that the decisions made in the reference service setting process are out-of-date, against
- the time it would take to undertake the additional process and then subsequently allow the service provider to build an access arrangement proposal around the reference services as approved by the regulator.

Stakeholders would be encouraged to engage with both the service provider and the regulator through the course of the reference service process, including making

¹⁸⁶ COAG Energy Council, Consumer participation in revenue determinations and associated regulatory processes, consultation paper on consumer resourcing, 5 October 2017.

¹⁸⁷ AER, submission to consultation paper on consumer engagement, 3 November 2017, p. 9.

¹⁸⁸ AER, submission to consultation paper on consumer engagement, 3 November 2017, p. 2.

¹⁸⁹ Submissions to the draft report: ACCC, p. 6; AER, Attachment p. 1; ERA, p. 7; MEU, pp. 13-14; PIAC, pp. 8-9; EUAA, p. 1; AGL, p. 1; EnergyAustralia, p. 1

submissions to the regulator seeking additional or varied reference services (where it is appropriate).

Some amendments to the draft recommendation have been made to the key steps in order to make clear the regulators' powers to act in the event that: a service provider either fails to submit a reference service proposal, or submits a deficient proposal; or that the regulator refuses to approve the service provider's reference service proposal:

- Pre-consultation: the service provider may engage with consumers, users and other stakeholders and the regulator in order to prepare the list of pipeline services and proposed reference services
- Pipeline service list and reference services proposal submission: the service provider submits the list of available pipeline services and its reference service proposal no later than 12 months prior to the review submission date
 - In the event that the service provider fails to submit the list of pipeline services and reference service proposal by 11 months prior to the revision submission date, the regulator will propose reference services for that pipeline and commence consultation on its reference services proposal. (This is similar to rule 63 of the NGR allowing the regulator to make or revise an access arrangement on failure by service provider to submit an access arrangement proposal.)
 - In the event that the service provider submits a deficient list of pipeline services and reference service proposal, the regulator will set a date for resubmission of the reference service proposal at its discretion.
- Publication: the regulator publishes the service provider's reference services proposal and list of pipeline services and seeks written submissions from stakeholders on the proposal (including whether additional reference services are required), with a consultation period of at least 15 business days.
- Assessment: the regulator makes its assessment of the reference services proposal having regard to, among other things, the reference service factors and any pre-consultation with its pipeline users and end users. In making its assessment, the regulator has the discretion to undertake further consultation, if required.
- Decision: the regulator publishes the reference service decision no later than six months prior to the review submission date
 - In the event the regulator refuses to approve the service provider's reference service proposal, the regulator may make or revise a reference service proposal and make a final decision on that proposal. (This is similar to rule 64 of the NGR allowing the regulator to make or revise an access arrangement on refusing to approve an access arrangement proposal.)
 - The regulator would not change the approach set out in this decision, unless there is a material change in circumstances that warrants a departure.

In submissions to the draft report, service provider stakeholders expressed the view that the regulator's decision on the reference service proposal should not be binding on the

subsequent access arrangement proposal.¹⁹⁰ The Commission acknowledges that unforeseen events may arise prior to the final decision. For this reason, the phrase a "material change in circumstances" was included in the draft recommendation. This has been retained in the final recommendation as it provides flexibility for the regulator to respond to changes in the service provider's business structure or planning, technological changes, changes in regulatory arrangements and changes in users' needs or preferences. This is consistent with the recent changes to the threshold for changing a service classification during the regulatory determination process for a distribution network service provider following a framework and approach process.¹⁹¹

In submissions to the draft report, user representatives suggested that the regulator should issue a reference service definition guideline, or list of common services.¹⁹² The Commission acknowledges that, in general, guidelines are consistent with good regulatory practice as they can assist users and other interested stakeholders to understand the variety of pipeline services available. However, the Commission does not consider the development of such a guideline needs to be stipulated in the NGR in this case. The NGR does not prevent a regulator from publishing guidelines, statements or any other explanatory documents that it considers may assist stakeholders at any time it considers appropriate.

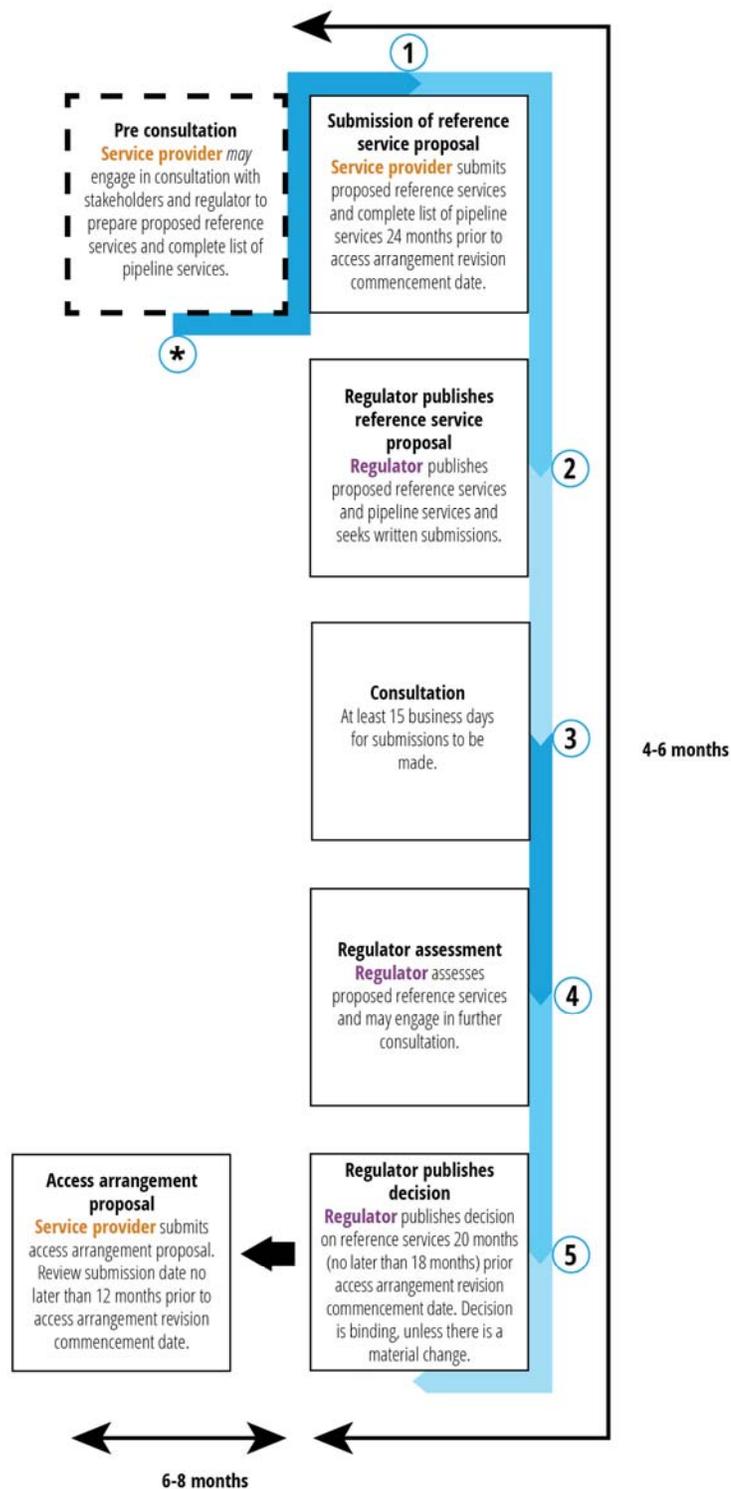
In response to submissions that users should be able to nominate reference services themselves for subsequent inclusion in the access arrangement, the Commission notes that the purpose of the consultation in the new reference service process is specifically to allow users to participate in reference service setting by nominating services or submitting that proposed services are not useful or should, in their view, be amended. This consultation is an important feature of the new process and informs the regulator in making its decision.

¹⁹⁰ Submissions to the draft report: APA, pp. 27-28; AGIG, p. 2; APGA, p. 2.

¹⁹¹ AEMC, National Electricity Amendment (Contestability of energy services) Rule 2017, 12 December 2017, pp. iii-iv.

¹⁹² Submissions to the draft report: PIAC, p. 9; MEU, p. 13.

Figure 5.1 Recommended reference service process



Following the regulator's decision on the reference service proposal, the service provider will submit the full access arrangement proposal based on the regulator's reference service decision. The proposal will be due to the regulator on the review

submission date (which will be at least 12 months prior to the revision commencement date for the next access arrangement period). This is expected to be between six and eight months after the regulator's decision on the reference service proposal. It is not expected that the service provider would wait for a final decision on the reference services before commencing its preparation of its access arrangement proposal. This is because some elements of the access arrangement are not contingent on the determination of the reference services by the regulator. These elements include the service provider's ongoing operational and capital expenditure (notwithstanding additional expenditure that may be associated with the addition of new reference services) and standard terms and conditions.

The regulator would assess the access arrangement proposal in line with Part 9, Division 8 of the NGR. Without the need to determine reference services concurrently with the assessment of other elements of the access arrangement proposal, the regulator is expected to make a final decision on the access arrangement proposal within eight months (and overall time limit of 10 months) of initiating the assessment, rather than within the current 13 month time limit under rule 13(1) of the NGR.¹⁹³

The Commission considers the new reference service setting process, which will commence at least 24 months prior to the revision commencement date of the next access arrangement, as well as the access arrangement process will provide sufficient opportunity for the service provider and regulator to engage on the proper formulation of the proposal, without the need for a formal request for a pre-submission conference. For this reason, formal provision for such a conference has been deleted from the NGR.

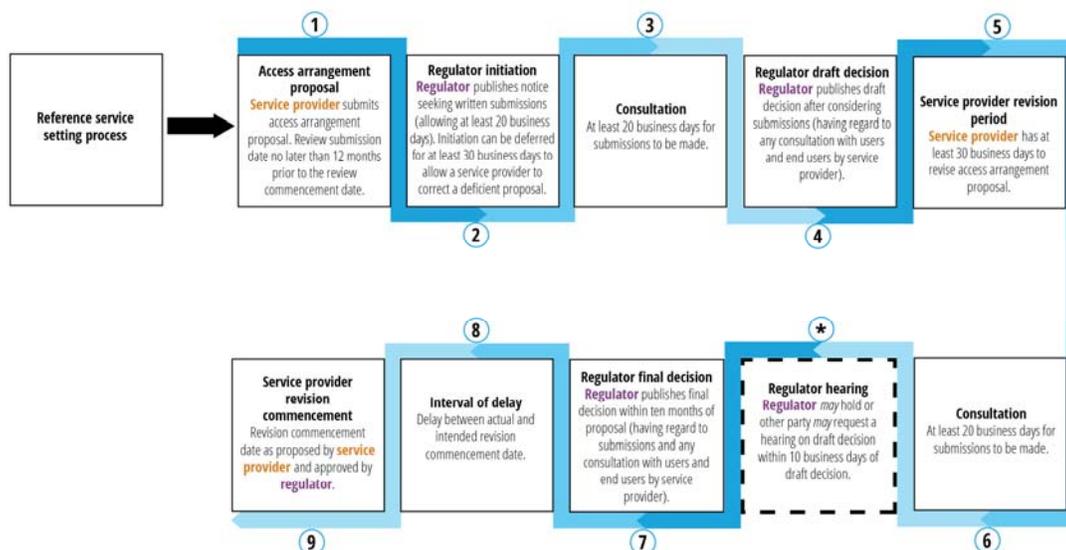
Service providers generally submit a revised access arrangement proposal every five years, or within a different review period as approved by the regulator in line with the NGO and revenue and pricing principles.¹⁹⁴ The Commission considers that with the introduction of the new reference service setting process, service providers should be provided with the flexibility to set the review submission date and revision commencement date (with the approval of the regulator) as appropriate to the circumstances of the particular pipeline. However there must be a minimum of 12 months between the review submission date and the revision commencement date.

The amended access arrangement process following the new reference service proposal process is shown in Figure 5.2.

¹⁹³ An overall time limit of 10 months is approximately 200 business days, of which 90 business days are allocated to consultation, leaving at least 110 business days for the regulator's assessment processes. A time limit of 8 months is 160 business days, leaving at least 70 business days for the regulator's deliberation processes.

¹⁹⁴ Rule 50(4) of the NGR.

Figure 5.2 Recommended access arrangement process



The introduction of a reference service process under the NGR would assist in the implementation of the recommendations in section 5.1 that:

- service providers submit to the regulator a list of all pipeline services that are or could be offered by the service provider on that pipeline
- service providers propose one or more reference services from the list of pipeline services (reference service proposal)
- the service provider's proposal and regulator's assessment is based on the recommended criteria for reference services.

As such, the Commission considers the introduction of a reference service process will contribute to the achievement of the NGO in the following ways:

- An upfront process would provide the regulator with additional time to carefully consider and determine the most appropriate reference service (or set of services) outside the reference tariff and non-tariff terms and conditions determination process. In doing so, the regulator may expand the number and type of reference services. This in turn will enable users to better negotiate with pipeline service providers for the services they seek and provide greater certainty in the event of arbitration.
- Pipeline users and prospective users are better informed about their preferences than the regulator. As such, constructive engagement between service providers, the regulator, users and consumers increases the likelihood that the reference services will align with the long term interests of the consumer. Further, improved user and consumer engagement with the regulatory process helps

reduce the risk of regulators making sub-optimal decisions because of poor information on user and consumer preferences.¹⁹⁵

The submission date for Jemena Gas Networks' revised access arrangement 2020-25 is due to the AER in June 2019. Jemena has already commenced preparations for the review, including customer and stakeholder engagement.¹⁹⁶ On this timing, a reference service process would need to commence in 2018. However, this would be before the COAG Energy Council has been able to consider the Commission's final report and recommendations and any rules subsequently made. Simply, the timing of this review process and Jemena's forthcoming access arrangement review do not allow for the adoption of the reference service process as drafted.

While Jemena has raised a particular concern, the Commission is alert to the need to carefully consider the implementation of all of its recommended amendments to the NGR and to make the transition to new processes as smooth as practicable. Further consideration of the implementation of the overall recommended package of reforms is discussed in Chapter 10 of this report.

The upfront reference service setting process is not intended or expected to be onerous, particularly as the submission of a proposal that identifies the proposed reference service and pipeline services list is already part of the access arrangement process, as is consultation and the regulator's decision on reference services. However, implementation of the recommended rule will require changes to processes for the regulators, service providers and users. To allow time for such preparations, the Commission considers that the rule, if made, may require transitional arrangements to provide time to prepare for the new reference service process.

5.2.5 Final recommendation

Recommendation 8: Introduce a reference service proposal process and improve the access arrangement review process

Amend the NGR in order to:

- introduce a fit for purpose process to determine the reference services to be provided by the service provider with the following key design elements:
 - the service provider submits to the regulator its full list of pipeline services and proposed reference services, having regard to the reference service factors to be specified in the NGR (recommendation 7)
 - in the event that the service provider fails to submit the list of pipeline services and reference service proposal by 11 months prior to the review submission date, the regulator will propose reference service(s) for that pipeline and commence consultation
 - in the event that the service provider submits a deficient list of pipeline services and reference service proposal, the regulator will set a date for resubmission of the reference proposal

¹⁹⁵ Productivity Commission, *Australia's urban water sector, Inquiry report, vol 1, no. 55*, 31 August 2011, p. 234.

¹⁹⁶ Jemena, submission to draft report, p. 5.

- the process for the making of the reference service proposal decision will be approximately six calendar months, with at least one round of consultation
- the regulator's final decision on the reference services is guided by the reference service factors and must be reflected in the access arrangement, unless there is a material change in circumstances that necessitates a change, having regard to the reference service factors
- in the event the regulator refuses to approve the service provider's reference service proposal, the regulator may make or revise a reference service proposal and make a final decision on that proposal
- enable service providers to set a review submission date and revision commencement date, with the approval of the regulator (rule 50 of the NGR)
- remove the pre-submission conference (rule 57 of the NGR)
- require the regulator to make a final decision on the access arrangement proposal within eight months of receipt of the proposal, with an absolute overall time limit of 10 months between the date that the service provider submits a full access arrangement proposal and the date that the regulator makes a final decision (rules 62(7) and 62(8) of the NGR).

The proposed amendments are reflected in the drafting of new rule 47A, the omission of rules 13 and 57 and the amendments to rules 50, 59 and 62.

6 Access arrangements

Box 6.1 Summary of findings and recommendations

All full regulation pipelines are required to have a full access arrangement which sets out reference tariff and non-tariff terms and conditions for each reference service on that pipeline.

The Commission has found there are significant concerns in relation to key elements of the full access arrangement process including: tariff setting (including aspects of the tariff variation mechanism); the allocation of risk in non-tariff terms and conditions; the process for reviewing access arrangements; the process for equalising revenue during any interval of delay between access arrangement periods; and the regulatory discretion framework.

There are opportunities to provide clarity and certainty around these key aspects of the access arrangement process in order to reduce regulatory and administrative burden and facilitate better outcomes for pipeline users, and ultimately gas consumers.

Accordingly, the Commission has made the following recommendations for changes to the NGR:

- consistent use of financial models: allow the regulators to develop and publish financial models that must be used by service providers in preparing an access arrangement proposal
- tariff variation mechanism: clarify that any over or under recovery of revenue arising from the use of a variable revenue cap or revenue yield control is to be addressed through the tariff variation mechanism
- allowed rate of return: clarify that the regulator is to have regard to the risk sharing arrangements implicit in the access arrangements when considering the non-tariff terms and conditions and the tariff variation mechanism
- revision period: extend the time in which service providers must submit a revised proposal to at least 30 business days and some consequential changes to the access arrangement process as a result
- interval of delay: clarify that the interval of delay is part of the access arrangement period, as well as the process for equalising revenue during this period
- regulatory discretion: remove the limited and no discretion regulatory framework so that there are no inappropriate limits on the regulator's ability to make decisions consistent with achieving the NGO.

A full access arrangement is revised for each access arrangement period through a public consultation process conducted by the regulator. The starting point of this revision process is the service provider's access arrangement revision proposal.

This chapter sets out the key issues and makes recommendations in relation to:

- reference tariff setting: consistent financial models and tariff variation mechanism
- non-tariff reference terms and conditions
- the access arrangement process: revision period and interval of delay
- regulatory discretion.

Chapter 7 focuses on the determination of efficient costs and total revenue that underlie the reference tariffs.

6.1 Reference tariff setting: consistent financial models

6.1.1 Current framework

Reference services and reference tariff and non-tariff terms and conditions inform access negotiation and dispute resolution for services on a full regulation pipeline. It is important that reference tariffs are set at a cost reflective level and that costs are correctly allocated across pipeline services. In order to set the tariffs for transmission reference tariffs and distribution tariff classes, the regulator must first determine the service provider's efficient costs using the building block approach set out in Part 9 of the NGR.¹⁹⁷

Reference tariffs are then set as follows:

- transmission pipelines: the NGR require that the tariffs are set in order to generate from the provision of each reference service the portion of revenue applying to that reference service.¹⁹⁸
- distribution pipelines: the service provider divides users into tariff classes that group customers based on their characteristics (such as residential and large industrial customers). Tariffs are then required to recover the revenue associated with providing the reference service to each of those tariff classes, as well as to send signals to customers about the cost impact of their consumption.¹⁹⁹

6.1.2 Summary of draft report findings and draft recommendations

The Commission found that service providers use different financial models to prepare and submit access arrangement proposals. This inconsistency has resulted in significant resources being invested by regulators, users and prospective users and their representatives in understanding the operation of these models, and in making comparisons between different access arrangements and access arrangement periods. The Commission concluded that amending the NGR to mandate the use of regulator develop financial models by service providers (where a model exists) is likely to assist in assessing efficient costs, total revenue and reference tariffs. In forming this conclusion, the Commission also found that the regulator should have discretion over whether to develop and publish financial models, and that in the event models are developed, they must be developed in consultation with service providers and other stakeholders.

¹⁹⁷ See Chapter 6 for discussion on total revenue and cost allocation.

¹⁹⁸ Rule 95 of the NGR.

¹⁹⁹ Rule 94 of the NGR.

As a result, the Commission made the following draft recommendation.

Draft recommendation 8: Develop financial models to be used by service providers

To include in the NGR a rule allowing the regulators to develop and publish financial models. If the models are developed and published, service providers will be required to use them to construct the capital base, and the total expected revenue from the building block approach. These models should be developed (and in future, modified or replaced) and published in line with:

- a consultation period of no less than 30 business days from publication of the proposed models
- the publication of issues, consultation and discussion papers, and the holding of conferences and information sessions, as appropriate
- the publication of a final decision within 80 business days.

The models should be available on the regulators' websites within six calendar months of the commencement of the rule and reviewed (at least) every five years.

6.1.3 Stakeholder submissions to draft report

Stakeholders supported the Commission's draft recommendation to include in the NGR a rule allowing the regulators to develop and publish financial models.²⁰⁰ However, the AER and ERA raised particular concerns with some details of the draft recommendation:

- The ERA highlighted the importance of the option for the regulator to develop the models, noting the administrative cost of building models may be prohibitive for the ERA. The ERA also questioned the necessity of the six month time constraint on publication of a model when development of the model is optional.²⁰¹
- The AER considered that indexation of the capital base must be included in the financial models. The AER noted that the absence of an explicit reference to the indexation of the capital base may undermine efforts to improve consistency and efficiency.²⁰²

APGA noted that consultation through the model development phase must be thorough and timely to ensure optimal outcomes for service providers, users and regulators.²⁰³

Submissions from consumer representatives EUAA and PIAC noted that the introduction of consistent models should facilitate greater consumer involvement in the regulatory process,²⁰⁴ reduce complexity, and allow for more effective negotiation by

²⁰⁰ Submissions to the draft report: AER, pp.1-2; APGA, p. 7; AusNet, p. 2; ERA, p. 7; EUAA, p. 1; PIAC, pp. 9-10.

²⁰¹ ERA, submission to the draft report, p. 7.

²⁰² AER, submission to the draft report, Attachment pp. 1-2.

²⁰³ APGA, submission to the draft report, p. 7.

²⁰⁴ EUAA, submission to the draft report, p. 1.

users, thereby promoting the NGO.²⁰⁵ AusNet also considered that alignment of the financial models should improve transparency and confidence in the regulatory process.²⁰⁶

While noting the potential benefits of consistent and standardised financial models, ATCO suggested that it would be important for the ERA to be able to develop modelling assumptions and parameters that suit local conditions and preferences.²⁰⁷

6.1.4 Commission analysis

Currently, service providers use different financial models to calculate their proposed total revenue requirements, including the capital base, from which reference tariffs are derived. The inconsistency is both across different pipelines, as well as across different access arrangement periods for the same pipeline. The AEMC understands that most east coast service providers submit access arrangement revision proposals using modified versions of the AER's financial models published under the NER (post-tax revenue model (PTRM) and roll forward model (RFM)).²⁰⁸

This led to the following concerns being raised by stakeholders:²⁰⁹

- the financial models used by service providers are varied and prone to errors from both the service providers and the regulator
- it can be difficult for regulators and stakeholders to compare the inputs and results between access arrangement revisions
- possible development of new financial models for different revisions of access arrangements may incur additional costs on service providers and generate process inefficiencies
- interested stakeholders may face difficulty in understanding and interpreting the inputs and results generated by the varied models
- regulators may find working with various financial models challenging, which possibly reduces the efficiency of the access arrangement review process.

In response to the Commission's interim report, the AER submitted that in order to improve efficiency and consistency of the access arrangements, service providers should be required to use these financial models it has developed, without variations. The AER considered that use of the PTRM and RFM models by electricity network service providers allow it to focus on the building block inputs, rather than

²⁰⁵ PIAC, submission to the draft report, pp. 9-10.

²⁰⁶ AusNet, submission to the draft report, p. 2.

²⁰⁷ ATCO, submission to the draft report, p. 6.

²⁰⁸ The PTRM calculates the annual revenue requirement for each year of a regulatory control period using the building block approach (clauses 6.4.1(a) and 6A.5.2(a) of the NER). The RFM is used to calculate the closing regulatory asset base (RAB) for the regulatory period, which becomes the opening RAB in the next regulatory control period (clauses 6.5.1(b) and 6A.6.1(b) of the NER).

²⁰⁹ AER, submission to the issues paper, p. 15. This issue was also raised at the AEMC's stakeholder workshop (14 December 2017) where there was a discussion by the regulators, users and consumer groups about the benefit of the use consistent financial models by service providers.

reconsidering established approaches.²¹⁰ These models were developed following industry and consumer consultation. The AER's view is that as a result, consumers also understand the models and are able to undertake analysis and make comparisons across regulatory proposals. In contrast, the AER commented that significant resources are spent understanding the operation of the models used by pipeline service providers, before regulators and consumers are able to work through the building block inputs.

In submissions to the draft report, stakeholders were supportive of the Commission's draft recommendation to mandate the use of consistent financial models.²¹¹ On this basis, the Commission has concluded that amending the NGR to mandate use of regulator developed financial models by service providers is likely to assist the regulators in assessing efficient costs, total revenue and reference tariffs by:

- reducing the opportunity for errors both by the service provider and the regulator
- making it easier for stakeholders to engage in the assessment of total revenue and its constituent components.

In its submission to the draft report, the AER sought to have the NGR explicitly specify the contents of the financial models to be developed and published in order to further promote efficiency and consistency. In contrast, the ERA suggested that the rules provide scope for the regulator to elect whether or not to develop financial models.

On the basis of these submissions and subsequent discussions with the regulators, the Commission considers that the NGR should provide a degree of flexibility as to whether the regulators develop and publish financial models, the type of models and the contents of those models, including indexation of the capital base. The Commission further considers that in the event the models are developed and published, their use by service providers to prepare access arrangement proposals will be mandatory.

There would be no requirement in the rules for the same financial models, modelling assumptions or parameters to be developed by the ERA and AER.

The models must be consistent with the total revenue building block methodology, opening capital base and any other financial element of the access arrangement contained Part 9 of the NGR. The models will also be developed in line with consultation procedures set out in rule 9B of the NGR and the distribution and transmission consultation procedures under which the NER financial models are developed and published (set out in clauses 6.16 and 6A.20 of the NER) which provide for:

- a consultation period of no less than 30 business days from publication of the proposed models
- the publication of issues, consultation and discussion papers, and the holding of conferences and information sessions, as appropriate
- the publication of a final decision within 80 business days.

²¹⁰ In discussions with the AEMC.

²¹¹ Submissions to the draft report: AER, pp.1-2; APGA, p. 7; AusNet, p. 2; ERA, p. 7; EUAA, p. 1; PIAC, pp. 9-10.

6.1.5 Final recommendation

Recommendation 9: Develop financial models to be used by service providers

Allow the regulators to develop and publish financial models that are consistent with Part 9 of the NGR and revenue and pricing principles. If the models are developed and published, service providers will be required to use them to construct the capital base, and the total expected revenue from the building block approach as set out in Part 9 of the NGR.

These models must be developed (and in future, modified or replaced) and published in line with consultation procedures set out in new rule 75A.

The proposed amendments are reflected in the drafting of new rules 75A and 75B of the NGR.

6.2 Reference tariff setting: tariff variation mechanism

6.2.1 Current framework

Rule 97 provides a mechanism for varying approved reference tariffs within an access arrangement period. Reference tariffs may vary in accordance with a fixed schedule (for example, annually), as a result of a cost pass through for a defined event (such as changes in taxation arrangements), or in accordance with a formula set out in the access arrangement, or a combination of these. The reference tariff variation formula may provide for:

- tariff basket price control (also known as a weighted average price cap): where the reference tariff for one or more reference services are set by the regulator in order to allow the service provider to generate the revenue to cover the efficient costs of providing those reference services. Weightings are used to account for different factors. This is the most common form of price control used under the NGR.
- variable caps on the revenue derived from a particular combination of reference services: where there is more than one reference service, the regulator may approve a maximum revenue that can be earned by the service provider for a combination of those reference services.
- revenue yield control: which is effectively a revenue cap, as the regulator sets the overall allowed revenue relevant for the reference services for the service provider and allows the service provider flexibility to adjust tariffs in line with changes in demand, in order to achieve the total revenue.
- a combination of the above.

In addition, the reference tariff variation mechanism in an access arrangement proposal must give the regulator "adequate oversight or powers of approval over variation of the reference tariff."²¹²

²¹² Rule 97(4) of the NGR.

6.2.2 Summary of draft report findings and draft recommendations

In the draft report, the Commission noted that the NGR allow for a tariff variation mechanism that is effectively a revenue cap, either through a variable revenue cap or revenue yield control.²¹³ The operation of revenue controls generally require some mechanism to account for the over or under recovery of revenue across years and access arrangement periods.

While the Commission did not consider that the current framework prevents the successful use of a variable revenue cap or revenue yield tariff, it nevertheless concluded that the operation of these mechanisms could be clarified in the rules. The Commission made a draft recommendation to this effect.

Draft recommendation 9: Clarify the operation of revenue caps

To amend the NGR to clarify that the use of a variable revenue cap or a revenue yield control tariff variation mechanism is to allow for any over or under recovery of the revenue cap or yield in the last year of one access arrangement period to be included in the tariff variation for the first year of the following access arrangement period.

6.2.3 Stakeholder submissions to draft report

APGA supported the proposed clarification of the operation of revenue caps.²¹⁴ The MEU suggested that the regulator use the new reference service process to determine the form of control to be applied to service providers.²¹⁵

While the ERA supported the intent of the draft recommendation, it suggested amendments to improve the workability of the proposal. The timing of the access arrangement determination process is such that tariffs in the first year of the following access arrangement are set before the completion of the final year of the previous period. As a result the actual revenue would be unknown at the time of determining the recovery of any revenue through the tariff variation mechanism. Instead, the ERA suggested the tariff variation to allow for any over or under recovery of revenue should occur in the second year of the following access arrangement period.²¹⁶

6.2.4 Commission analysis

The NGR allow for a tariff variation mechanism that is effectively a revenue cap, either through a variable revenue cap or a revenue yield control.²¹⁷

Under these rules, the regulator is able to set a revenue target for each year of the access arrangement and the service provider is able to adjust reference tariffs (approved by the regulator) in order to achieve that revenue. The tariffs are based on forecast demand, set in advance while the actual revenue can only be observed ex-post. In practice, as the forecast and actual demand are unlikely to reconcile over the period, the service

²¹³ Rules 97(2)(a) & (c) of the NGR.

²¹⁴ APGA, submission to the draft report, p. 7.

²¹⁵ MEU, submission to the draft report, p. 14.

²¹⁶ ERA, submission to the draft report, p. 8.

²¹⁷ Rules 97(2)(a) & (c) of the NGR.

provider can reasonably be expected to under or over recover revenue year to year. As such, revenue yield controls generally include some mechanism to account for the over or under recovery of revenue across years and access arrangement periods.

In contrast to gas pipelines, most electricity distribution network service providers are regulated through a revenue cap. Under the NER, the under or over recovery of revenue arising from the application of a control mechanism in the previous period is included as part of the building blocks:²¹⁸

“(a) Building blocks generally

The annual revenue requirement for a Distribution Network Service Provider for each regulatory year of a regulatory control period must be determined using a building block approach, under which the building blocks are:

...

(6) the other revenue increments or decrements (if any) for that year arising from the application of a control mechanism in the previous regulatory control period - see paragraph (b)(6).

...

(b) Details of the building blocks

For the purposes of paragraph (a):

...

(6) the other revenue increments or decrements referred to in paragraph (a)(6) are those that are to be carried forward to the current regulatory control period as a result of the application of a control mechanism in the previous regulatory control period and are apportioned to the relevant year under the distribution determination for the current regulatory control period.”

However, the AER has observed that while providing for variable revenue cap and revenue yield controls in the tariff variation mechanism provisions, the NGR do not include any specific provisions to allow the regulator to account for over or under recovery of revenue across access arrangement periods. The AER has suggested that changes to rules 76 (building block approach) and 92 (revenue equalisation) of the NGR be made to specifically provide for the operation of a revenue cap in a manner similar to that under the NER.²¹⁹

Currently, there are no access arrangements with a variable revenue cap or a revenue yield control tariff variation mechanism. However, a revenue yield control mechanism has been used under the code. This suggests that these tariff control mechanisms may be approved by a regulator and used for a pipeline provided the access arrangement clearly establishes the operation of the mechanism. Accordingly, the Commission does not consider the operation of rule 92 of the NGR unambiguously prevents the successful

²¹⁸ See clauses 6.4.3(a)(6) and 6.4.3(b)(6) of the NER.

²¹⁹ AER email to AEMC, 31 January 2018.

use of a variable revenue cap or revenue yield tariff variation mechanism as the AER has suggested.

The general approach of the NGR is to have an access arrangement provide clarity on the operation of the tariff variation mechanism for a particular pipeline. This applies to any specific method of tariff variation mechanism employed by a service provider.²²⁰

Nevertheless, the Commission considers that greater guidance to service providers, pipeline users and regulators may be provided if the NGR was amended to clarify that if a variable revenue cap or a revenue yield control mechanism is approved for an access arrangement, then the tariff variation mechanism can accommodate an adjustment relevant to the final year of one access arrangement period to be made in the following access arrangement period.

The ERA noted that the Commission's draft recommendation that the tariff variation adjustment should be made in the first year of the subsequent access arrangement would be unworkable. As a result, the final recommendation differs from the draft recommendation. The Commission considers that any over or under recovery of revenue in one access arrangement period can be made in the following access arrangement period, although not necessarily in the first year of that subsequent period.

A specific issue regarding the over and under recovery of revenue across access arrangement periods is contemplated in the Jemena Gas Networks (JGN) rule change request submitted to the AEMC in December 2017.²²¹ In the rule change request, JGN is seeking to amend the NGR to allow for cross period revenue and price smoothing between its 2015-2020 and 2020-2025 access arrangement periods.²²² The Commission has made a draft rule determination on this rule change.²²³

6.2.5 Final recommendation

Recommendation 10: Clarify the operation of revenue caps

Clarify that where the use of a variable revenue cap or a revenue yield control tariff variation mechanism is included in an access arrangement, the mechanism must also provide for any over or under recovery of the revenue cap or yield in the last year of one access arrangement period to be included in the tariff variation mechanism in the following access arrangement period.

The proposed amendments are reflected in the drafting of amendments to rule 92 of the NGR.

²²⁰ The NGR level of prescription regarding within-period tariff variations distinguishes it from the equivalent provisions in the NER.

²²¹ Jemena Gas Networks, Cross period price smoothing for Jemena Gas Networks, Rule change proposal, 14 December 2014.

²²² The JGN rule change request relates to JGN's specific circumstances, where the (higher) 2015-2020 tariffs have prevailed due to an undertaking (and not an access arrangement) with the AER. The approved tariffs for its 2020-2025 access arrangement are considerably lower and JGN is concerned that without a mechanism to allow cross period revenue and price smoothing, its customers will be exposed to price volatility.

²²³ AEMC, *Cross period revenue smoothing (gas), draft rule determination*, 7 June 2018.

6.3 Non-tariff reference terms and conditions

6.3.1 Current framework

In approving the reference services and reference tariffs for a full access arrangement, the regulator must also assess the proposed non-tariff terms and conditions. As provided by rule 100 of the NGR, all provisions in an access arrangement should be consistent with the NGL, NGR and any procedures in force when the terms and conditions of the access arrangement are determined or revised.

In assessing reference service terms and conditions, the AER considers:²²⁴

- risk allocation: risks are allocated to the party best placed to control or mitigate that risk, as effective risk mitigation is likely to reduce the total cost of providing the reference service(s) to the consumers in the long-term
- legal consistency and clarity: terms and conditions must be clear and legally certain as they are used as the basis for commercial negotiations and in resolving any access dispute
- consistency with the relevant requirements in the NGL, NGR and the relevant procedures in force.

In making a decision on the terms and conditions of the Goldfields Gas Pipeline access arrangement, the ERA stated:²²⁵

“The Authority considered it important that the terms and conditions for a reference service included in the access arrangement are presented so they can be readily accepted by a prospective user "as is" (without requiring any further changes), if a prospective user wishes to enter a contract for the reference service.”

6.3.2 Summary of draft report findings and draft recommendations

In the draft report, the Commission found that some stakeholders were concerned that regulators had not given adequate attention to the assessment of the non-tariff terms and conditions contained in access arrangements. As a result, there were concerns that some non-tariff terms and conditions did not appropriately allocate risk.

In making this finding, the Commission noted that the allowed rate of return applied to the asset base to determine total revenue and reference tariffs (including through the reference tariff variation mechanism) is set to account for a degree of risk in providing the reference service. On this basis, the Commission concluded that while the NGR implicitly require consideration of the allocation of risk, the NGR could be clarified in

²²⁴ AER, Draft decision, Roma to Brisbane Gas Pipeline access arrangement 2018-22, Attachment 12, pp. 19-20 (note, this attachment forms part of the AER's final decision: AER, Final decision, Roma to Brisbane Gas Pipeline access arrangement 2018-22, Overview, November 2017, p. 2; see also AER, Draft decision, Australian Gas Networks Victoria and Albury Gas access arrangement 2018-22, July 2017, p. 48).

²²⁵ ERA, Final decision on proposed revisions to the access arrangement for the Goldfield Gas Pipeline, 30 June 2016, p. 541.

order to explicitly require the regulator to have regard to the risk sharing arrangements in the economic elements of the access arrangement when determining the non-tariff terms and conditions and the reference tariff variation mechanism.

The Commission also found that a degree of standardisation of non-tariff terms and conditions in access arrangements already exists and concluded that there was not sufficient justification for introducing a regulatory process in order to set common terms. It made a draft recommendation in this regard.

Draft recommendation 10: Clarify that the regulator is to have regard to risk sharing arrangements

The Commission recommends amending rules 97 and 100 of the NGR to clarify that the regulator is to have regard to the risk sharing arrangements implicit in the economic elements of the access arrangements when determining:

- the non-tariff terms and conditions
- the reference tariff variation mechanism.

6.3.3 Stakeholder submissions to draft report

Stakeholder submissions were broadly supportive of the Commission's draft recommendation and considered that the amendment to the NGR will allow the regulators to consider whether the non-tariff terms and conditions reflect appropriate risk sharing arrangements.²²⁶

EnergyAustralia however considered that the proposed amendment was insufficient to address the exercise of monopoly power by service providers when setting the terms and conditions. EnergyAustralia suggested that the AEMC develop a more rigorous framework to guide regulators in assessing the appropriate allocation of market risk in the terms and conditions.²²⁷

In its submission, APA noted that the proposed change is a clarification of existing powers rather than new powers for the regulator, but cautioned that "regulators should not be given the impossible task of reflecting contract risk in the rate of return."²²⁸ APA's submission highlighted concerns with the Commission's discussion of the role of the rate of return²²⁹ which it contends is mischaracterised and does not appropriately take account of the difference between diversifiable (non-systemic) and non-diversifiable (systemic) risk. APA contended that "non-systemic risk should not attempt to be included in the rate of return."²³⁰

On this issue, the AER noted there may be practical difficulties in implementing the Commission's draft recommendation and sought further clarification on its purpose

²²⁶ Submissions to the draft report: AGL, p. 1; MEU, p. 15; ERA, p. 8

²²⁷ EnergyAustralia, submission to the draft report, p. 3.

²²⁸ APA, submission to the draft report, pp. 25-26.

²²⁹ Rule 97(3) of the NGR.

²³⁰ APA, submission to the draft report, p. 26. A non-diversifiable risk (also known as market or systemic risk) is the risk associated with an investment asset that cannot be reduced or eliminated by adding that asset to a diversified investment portfolio. In contrast, diversifiable risk (non-systemic) can be eliminated through diversification.

and objective.²³¹ In subsequent discussions with the AER, it supported the intent of the draft recommendation which is to highlight the importance of the link between the tariff and non-tariff elements of an access arrangement.

6.3.4 Commission analysis

Assessing terms and conditions

Throughout this review, pipeline users have expressed concern about the link between the tariff and the non-tariff terms and conditions contained in access arrangements, particularly in relation to risk allocation.²³²

Further, stakeholders have been concerned that the regulators have given limited attention to the non-tariff terms and conditions contained within access arrangements.²³³ On this, the AER has stated:²³⁴

“In some cases, greater prescription or intervention on our part in determining these terms and conditions may impede competitive market outcomes and be inefficient. There are two reasons for this: first, our lower levels of information than that of [service providers] and users and second, the user-specific nature of many issues. Accordingly, we will generally avoid proposing amendments in these cases where flexibility to negotiate commercial outcomes is desirable. We expect that both service providers and users will negotiate in good faith on such matters.”

In its submission to the AEMC's issues paper, AGL noted that the non-tariff terms and conditions often remove commercial risks from service providers, particularly in relation to increasingly restrictive terms and conditions contained within warranty and indemnity clauses.²³⁵ AGL supported the Commission's draft recommendation and in its submission to the draft report noted that the amendment "will allow the AER to take account for the potential for regulatory gaming due to information asymmetry."²³⁶

Other stakeholders expressed concern about the price of overruns and imbalances, noting that these charges degrade the value of the primary service. In particular, Hydro Tasmania commented that the building block approach does not account for the costs of such restrictive terms and conditions on users, when determining the reference tariff.²³⁷

The price of overruns and imbalances was also raised by stakeholders in response to the Roma to Brisbane Pipeline access arrangement proposal.²³⁸ Both the Australian Energy

231 AER, submission to the draft report, Attachment p. 2.

232 Submissions to the issues paper: EUAA p. 2; AGL, p. 3; Hydro Tasmania, p. 3. Submissions to the draft report: AGL, p. 1; MEU, p. 15; ERA, p. 8; EnergyAustralia, p. 3.

233 Submissions to the issues paper: EUAA, p. 2; MEU, p. 16; PIAC, p. 6; Central Petroleum, p. 3.

234 AER, *Draft decision, Roma to Brisbane Gas Pipeline access arrangement 2018-22*, Attachment 12, pp. 19-20 (note, this attachment forms part of the AER's final decision (AER, *Final decision, Roma to Brisbane Gas Pipeline access arrangement 2018-22*, Overview, November 2017, p. 2).

235 AGL, submission to the issues paper, p. 2.

236 AGL, submission to the draft report, p. 1.

237 Hydro Tasmania, submission to the issues paper, p. 3.

238 APA, *Roma to Brisbane Pipeline, Proposed revised access arrangement*, 2017-22, September 2016.

Council and Shell's Queensland Gas Consortium (QGC) asked the AER to consider whether:

- the proposed rates for overruns, imbalances and variances were reasonable
- the tariffs reflected the level of risk borne by the service provider.

In regard to these points, the Commission notes that the allowed rate of return that is applied to the asset base to determine total revenue and reference tariffs is set to account for a degree of risk in providing the reference service. Rule 87(3) of the NGR states:

“The allowed rate of return objective is that the rate of return for a service provider is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the service provider in respect of the provision of reference services (the allowed rate of return objective).”

However, there is no explicit corresponding link made to:

- rule 100: the allowed rate of return is not referenced in relation to the assessment of terms and conditions for appropriate risk allocation
- rule 97(3): which sets out the criteria for the regulator to assess a proposed tariff variation mechanism. These criteria do not include the allowed rate of return as a criterion in assessing the risk underlying a tariff variation mechanism.²³⁹

On this basis, the Commission considers that the NGR could be clarified in order to explicitly require the regulator to have regard to the risk sharing arrangements of the access arrangement when determining the non-tariff terms and conditions and the reference tariff variation mechanism.

However, in their submissions to the draft report, both APA and the AER noted that the Commission's draft recommendation would be problematic to implement.²⁴⁰ Following consideration of these points raised, the Commission has amended its draft recommendation such that the recommendation does not reference "economic elements." It is expected this amendment will address concerns that the draft recommendation set the regulator the "impossible task of reflecting contract risk in the rate of return."²⁴¹ Nevertheless, the recommendation is intended to highlight the importance of the link between the tariff and non-tariff elements of an access arrangement. Together, all of these elements must appropriately reflect the nature of the reference services in the access arrangement.

A consequence of this rule (if made) is that the regulator would be required to demonstrate its consideration of the non-tariff terms and conditions for appropriate allocation of risk for the reference services included in an access arrangement. In doing so, the regulator may consider:

²³⁹ For example, one of the formulas for tariff variation listed under rule 97(2) allows for revenue yield control. A revenue yield control effectively allows the service provider to change the reference tariff in response to the difference between actual and forecast demand.

²⁴⁰ Submissions to the draft report: AER, Attachment p. 2; APA, p. 26.

²⁴¹ APA, submission to the draft report, p. 26.

- explicitly seeking stakeholder submissions on the non-tariff terms and conditions contained in the access arrangement
- seeking expert advice on the non-tariff terms and conditions
- referring to the non-terms and conditions in other access arrangements, and standard or operational GTAs.

Standardisation of non-tariff terms and conditions

Some stakeholders are of the view that standardisation of non-tariff terms and conditions in the access arrangement may address concerns about risk allocation in contracts and reduce costs for users.²⁴²

In its east coast gas review, the Commission recommended that in order to facilitate a greater level of capacity trading, key primary and secondary capacity²⁴³ contractual terms for pipeline services should be standardised (such as operational and prudential terms).²⁴⁴ The Commission considered that the standardisation of operational gas transport agreements (GTAs)²⁴⁵ should be prioritised over primary GTAs²⁴⁶ in order to make capacity more "fungible" and to reduce search and transaction costs.²⁴⁷ The GMRG's Operational GTA Code which sets out standard and facility specific terms will come into effect in the second half of 2018.²⁴⁸

The issue of standardisation of non-tariff terms and conditions of full access arrangements was discussed at the December 2017 AEMC stakeholder workshop. The discussion indicated that there is some commonality between the non-tariff terms and conditions on a range of pipeline services, and that to some degree standardisation of non-tariff terms and conditions already exists.²⁴⁹ Specifically in relation to full regulation pipelines, the regulators encourage standardisation and regularly review non-tariff terms and conditions for consistency across access arrangements.

The Commission also notes that some service providers have adopted pro-forma contracts. For example, the APA pro-forma contract provides for facility specific terms and conditions, such as contract Maximum Daily Quantity (MDQ), rates and contract term, with standard terms forming the remainder of the contract.

²⁴² Submissions to the draft report: MEU, p. 15; AGL, p. 1. Submissions to the interim report: MEU, p. 14; AGL, pp. 1-3; HydroTasmania, p. 3.

²⁴³ Primary capacity is the service provided by the service provider to the user (shipper). Secondary capacity is the pipeline service that has been contracted from user to user (shipper to shipper).

²⁴⁴ AEMC, East coast wholesale gas market and pipeline frameworks review, Stage 2 Final report, 23 May 2016, pp. 85-87.

²⁴⁵ Operational GTAs are shipper to shipper (user to user) contracts for secondary capacity. Operational GTAs do not form part of an access arrangement.

²⁴⁶ AEMC, East coast wholesale gas market and pipeline frameworks review, Stage 2 Final report, 23 May 2016, p. 86.

²⁴⁷ Primary GTAs are the contracts between the service provider and user (shipper).

²⁴⁸ GMRG, Information paper: Capacity trading reform package design approval and implementation, 19 March 2018, p. 3.

²⁴⁹ APA, Gas transportation agreement.

It appears the essence of the issue is whether a standard set of terms and conditions would be to user's satisfaction with the particular non-tariff terms and conditions for a pipeline. The Commission's view is that user concerns regarding the non-tariff terms and conditions of an access arrangement should be raised within the context of an access arrangement process. The regulators can support users in this by communicating their own assessment of the proposed non-tariff terms and conditions and working collaboratively with users on this matter. In relation to this, the Commission considers that its recommendation to introduce a new reference service process will provide both regulators and stakeholders with time and opportunity to carefully consider the detail of the non-tariff terms and conditions to make a thorough assessment within the access arrangement process (see Chapter 5).

Further, the Commission understands that significant resources would be required from users, service providers and regulators in order to standardise the non-tariff terms and conditions of full access arrangements. While the issue of standardisation was raised by MEU and AGL in response to the Commission's draft report,²⁵⁰ from subsequent discussions with stakeholders and regulators it is not clear that there is sufficient support for such a process at this time.²⁵¹

For these reasons, the Commission does not consider that there is a clear case for introducing a new regulatory process to assess all non-tariff terms and conditions across all scheme pipelines for the purpose of setting common terms at this time. Consistent with its draft report, the Commission has concluded that no change be made to the NGR in relation to this issue.

6.3.5 Final recommendation

Recommendation 11: Clarify that the regulator is to have regard to risk sharing arrangements

Clarify that the regulator is to have regard to the risk sharing arrangements implicit in the access arrangements when determining:

- the non-tariff terms and conditions
- the reference tariff variation mechanism.

The proposed amendments are reflected in the drafting of amendments to rules 97 and 100 of the NGR.

6.4 Access arrangement process: revision period

6.4.1 Current framework

The timeframe for submitting a revised access arrangement proposal in response to the regulator's draft decision is at least 15 business days, as set out in rule 59(3) of the NGR:

“If an access arrangement draft decision indicates that revision of the access arrangement proposal is necessary to make the proposal acceptable to the

²⁵⁰ Submissions to the draft report: MEU, p. 15; AGL, p. 1.

²⁵¹ At the December 2017 AEMC stakeholder workshop and in subsequent discussions with regulators and other stakeholders.

AER, the decision must fix a period (at least 15 business days) for revision of the proposal (the revision period).”

The NGR also provide a consultation period of at least 20 business days for stakeholders to make submissions on the service provider's revised proposal.²⁵²

6.4.2 Summary of draft report findings and draft recommendation

In the draft report, the Commission found that revising an access arrangement can be complex and time intensive and that 15 business days may be insufficient to appropriately engage with stakeholders on the required changes. The Commission concluded that a longer revision period should encourage service providers to work collaboratively with the regulator and stakeholders to resolve the areas of contention and make necessary changes. An extended revision period should also improve the likelihood that the revised proposal would be acceptable to the regulator, and aligned with user preferences.²⁵³ The Commission made a draft recommendation to this effect.

Draft recommendation 11: Extend the revision period

To amend rule 59(3) of the NGR to extend the revision period from at least 15 business days to at least 30 business days.

6.4.3 Stakeholder submissions to draft report

All stakeholders that commented on draft recommendation 11 supported the extension of the revision period to at least 30 business days.²⁵⁴ Jemena noted that the proposed extension provides service providers with more a more realistic timeframe in which to consult with consumers, respond to the draft decision and apply internal governance processes.²⁵⁵

6.4.4 Commission analysis

Through this review service providers have expressed concerns that the 15 business day time period does not provide adequate time to digest and respond to the regulator's draft decision. Similarly, service providers do not consider that this period allows them to engage with stakeholders on required changes.²⁵⁶

Revising an access arrangement can be complex and additional time may be required in order to clarify, respond, and make appropriate changes to the access arrangement proposal in response to the draft decision. Under the current framework, the regulator has full discretion to set the revision period and consultation period. In recent times,

²⁵² Rule 59(5)(c)(iii) of the NGR.

²⁵³ AEMC, *Review into the scope of economic regulation applied to covered pipelines*, Draft report, 27 February 2018, pp. 86-88.

²⁵⁴ Submissions to the draft report: APGA, p. 7; AusNet, p. 2; ERA, p. 8; Jemena, p. 4.

²⁵⁵ Jemena, submission to the draft report, p. 4.

²⁵⁶ Submissions to the issues paper: DBP and AGN, p. 5; ENA, p. 2; Jemena, p. 3; subsequent discussions with AEMC staff; Submissions to draft report: APGA, p. 7; AusNet, p. 2; ERA, p. 8; Jemena, p. 4.

both the AER and ERA have set revision periods of between 27 and 40 business days and consultation periods of between 20 and 25 business days.²⁵⁷

Service providers and users have suggested that a longer revision period may encourage service providers to work collaboratively with the regulator and stakeholders to resolve the areas of contention and make necessary changes.²⁵⁸ This would increase the likelihood that the revised proposal would then be acceptable to the regulator, and aligned with user preferences.

Further, while regulators customarily set longer revision periods, the service provider cannot rely on a longer period in its planning for managing the access arrangement process if the decision on extending the revision period beyond 15 business days is only made at the time the draft decision is made. A change to the NGR to make a longer revision period would enable service providers to rely on that specified period in planning their response to the draft decision. This would make resourcing and planning its work over access arrangement process more straightforward.

The Commission also notes that under the NER, network service providers have more than 15 business days to submit a revised regulatory proposal in response to the regulator's draft determination.²⁵⁹

The Commission considers that a period greater than 15 business days is required for the revision period. This conclusion is unchanged from the draft report.

Under the current framework, as a consequence of extending the revision period, the regulator would have less time to consider the revised proposal and issues its final decision without further changes being made. The introduction of a separate process to determine reference services is expected to provide capacity for the regulator to assess the remaining elements of the access arrangement within the access arrangement assessment timeframe (as discussed in Chapter 5).

257 See AEMC, Review into scope of economic regulation applied to covered pipelines, interim report, 31 October 2017, pp. 29-30.

258 Submissions to the issues paper: DBP and AGN, p. 5; ENA, p. 2; Jemena, p. 3; EUAA, p. 3; Submissions to the draft report: APGA, p. 7; AusNet, p. 2; ERA, p. 8; Jemena, p. 4.

259 Under clauses 6.10.3(a) and 6A.12.3(a) of the NER, network service providers have 45 days in which to submit a revised regulatory proposal.

6.4.5 Final recommendation

Recommendation 12: Extend the revision period

Extend the revision period from at least 15 business days to at least 30 business days.

The proposed amendments are reflected in the drafting of the amendment to rule 59 of the NGR.

6.5 Access arrangement process: interval of delay

6.5.1 Current framework

The NGR provide that where there is a delay between the intended commencement of a revised access arrangement and its actual commencement, the tariffs in force in the previous access arrangement will continue until the revised access arrangement commences. This delay between the two dates is referred to as the 'interval of delay.' Rule 92(3) of the NGR states:

“However, if there is an interval (the interval of delay) between the revision commencement date stated in a full access arrangement and the date on which revisions to the access arrangement actually commence: (a) reference tariffs, as in force at the end of the previous access arrangement period, continue without variation for the interval of delay; but (b) the operation of this subrule may be taken into account in fixing reference tariffs for the new access arrangement period.”

The effect of rule 92(3)(a) of the NGR is that during an interval of delay, the applicable reference tariffs are not derived using the approved tariff variation mechanism set out in rule 92(2). As a consequence, reference tariffs may not reflect an assessment of efficient forecast costs of providing the reference services after the revision commencement date for the duration of the interval of delay.

The definitions of "an access arrangement period" in rule 3 of the NGR include six different meanings of the term, each of which could apply at varying times of the access arrangement process.

“access arrangement period for an applicable access arrangement means any of the following periods that may be applicable to the access arrangement:

- (a) the period between the commencement of the access arrangement and the commencement of the first revision of the access arrangement;
- (b) if the first revision of the access arrangement has not yet taken effect - the period between the commencement of the access arrangement and the revision commencement date for the access arrangement;
- (c) if revision of the access arrangement prior to its expiry is not contemplated - the period between the commencement of the access arrangement and the expiry date for the access arrangement period;
- (d) the period between the actual commencement of successive revisions of the access arrangement;

(e) the period between the commencement of the last revision of the access arrangement and the revision commencement date for the access arrangement;

(f) if the access arrangement has been revised but further revision prior to its expiry is not contemplated - the period between the commencement of the last revision of the access arrangement and the expiry date for the access arrangement.”

6.5.2 Summary of draft report findings and draft recommendations

In the draft report, the Commission found that there was some ambiguity in the NGR relation to the definition of access arrangement, and the process for equalising revenue during an interval of delay. In making this finding, the Commission noted that this issue was the subject of a judicial review by the Supreme Court of Western Australia and had previously been considered by the Australia Competition Tribunal.²⁶⁰ The Commission concluded that the operation of the NGR in respect of the interval of delay warranted clarification for future access arrangements. However, it also acknowledged that further insight into the meaning of "interval of delay" may emerge from the Supreme Court of Western Australia in due course.

Draft recommendation 12: Clarify the process for equalising revenue during the interval of delay

To amend the NGR in order to clarify that:

- the process for equalising revenue during an interval of delay is to result in a service provider being no better or worse off as a result of the interval of delay
- the definition of the access arrangement period includes the period known as the interval of delay.

To achieve this draft recommendation, the Commission expects that amendments to rules 3 and 92 of the NGR will be required.

6.5.3 Stakeholder submissions to draft report

Three stakeholders made submissions on the Commission's analysis and draft recommendation in relation to the interval of delay.

APA highlighted concerns that the draft recommendation could affect efficiency incentives for pipeline operation and investment, particularly where the interval of delay is long:²⁶¹

“The result [of the AEMC's proposed rule amendment] will be reference tariffs for the remainder of the new period which are, if the interval of delay is long, significantly below (above) those which will recover the service provider's forward looking costs. Those tariffs, which will apply for the remainder of the new access arrangement period, do not provide incentives for efficiency. They are below (above) the tariffs which should promote

²⁶⁰ Application by ATCO Gas Australia Pty Ltd [2016] ACompT10.

²⁶¹ APA, submission to the draft report, p. 24.

efficient operation and use of the natural gas services. They may, because they are artificially low (high), delay (bring forward) what would otherwise be efficient investment in a pipeline system.”

APA considered that such an amendment in effect condones late decision making by the regulator. It suggested the more appropriate amendment to the NGR would be to ensure the party controlling the outcome (the regulator) should be made to comply with its obligation to make a final decision within 13 months of receiving a service provider's access arrangement proposal (under rule 13 of the NGR).²⁶² APA further considered that no change should be made to the NGR in respect of the interval of delay until the Supreme Court of Western Australia has handed down its decision on the Goldfields Gas Pipeline access arrangement.

ATCO considered that the proposed clarification is unlikely to help resolve whether forecast or actual revenue should be considered.²⁶³

In contrast, ERA supported amending the NGR to clarify that the regulator should equalise (in present value terms) revenue during an interval of delay to ensure that the service provider (and customers) are no better or worse off as a result of the delay. ERA also supported amendments to the definition of access arrangement contained in rule 3 of the NGR to incorporate the period known as the interval of delay.²⁶⁴

6.5.4 Commission analysis

The Commission previously considered the role of rule 92(3) of the NGR in its final determination of the economic regulation of network service providers and price and revenue regulation of gas services in 2012.²⁶⁵ In this context, APA raised concerns that the then proposed amendments to the NGR would result in a delay in the commencement of the access arrangement revisions for the ATCO Gas distribution pipeline and the Goldfields Gas Pipeline. In response the Commission noted:²⁶⁶

“...There are existing provisions within the NGR that set out what is to occur when there is a delay between the revision commencement dates specified in an access arrangement and the date on which the revisions actually commence.”

Specifically in relation to the operation of rule 92(3) of the NGR to true-up revenue during any interval of delay, the Commission stated:²⁶⁷

“...the reference tariffs prevailing at the end of the previous access arrangement period continued for the duration of the delay and a NPV [net

262 *ibid.*, pp. 23-25.

263 ATCO, submission to the draft report, p.7.

264 ERA, submission to the draft report, p. 8.

265 AEMC, National Electricity Amendment (Economic regulation of service providers) Rule 2012; National Gas Amendment (Price and revenue regulation of gas services) Rule 2012, 29 November 2012.

266 *ibid.*, p. 276.

267 *ibid.*, p. 276.

present value] neutral true-up was carried out on a smoothed basis when the new reference tariffs were approved.

...the Commission is satisfied that rule 92(3) can be relied upon to deal with the effect of any delay between:

- the revision commencement date specified in the ... access arrangements; and
- the date the revisions actually take effect for these two pipelines.”

The Commission also noted:²⁶⁸

“The Commission accepts that the use of the word "may" [in rule 92(3)(b)] appears to provide the AER with some discretion as to whether a true-up will be carried out. However, it must be borne in mind that when exercising discretion, the AER is required to have regard to be the NGO and RPP. In the Commission's opinion, these sections of the NGL would support the application of a true-up mechanism if the reference tariffs prevailing in the period of delay were lower (higher) than what they would otherwise have been.”

Following the 2012 rule change process, the ERA assessed proposed revisions to the Goldfield Gas Pipeline access arrangement. In its final decision on the Goldfields Gas Pipeline 2015-2019 access arrangement, the ERA relied on rule 92(3) of the NGR to determine the reference tariffs for this period by taking account the tariffs that applied during the 18 month period between the intended and actual commencement dates of the access arrangement (that is, the interval of delay).

The ERA considered that rule 92(3) of the NGR allowed it to set tariffs for the 2015-2019 access arrangement by taking into account that the forecast revenue during the interval of delay was higher than the total revenue that would have been received using the building block approach in rule 79. In effect, the ERA applied a true-up to the 2015-2019 tariffs to account for the higher tariffs received during the interval of delay. In making its final decision, the ERA stated:²⁶⁹

“In calculating the approved reference tariffs for the third access arrangement the Authority has factored in the interval of delay and determined tariffs that begin on 1 July 2016 to ensure that GGT [Goldfields Gas Transmission Pty Ltd] is no better or worse off as a result of the delay.”

GGT sought judicial review of this decision on the basis that the rules do not permit an inter-period true up or correction for a perceived windfall in a prior access arrangement period. It argued that:²⁷⁰

“ERA fixed those tariffs by impermissibly taking into account the impact of, and adjusting for, reference tariffs that had already been charged in the earlier interval of delay. The ERA, in effect, reduce the reference tariffs that

²⁶⁸ *ibid.*, p. 252.

²⁶⁹ ERA, *Goldfields Gas Pipeline access arrangement final decision*, 30 June 2016, p. 449.

²⁷⁰ *Goldfields Gas Transmission Pty Ltd v ERA* [2018] WASC 104, para. 6.

it would otherwise have determined for the period ... to adjust for the over recovery by GGT during the interval of delay.”

However, the Supreme Court of Western Australia found the ERA "did not make an error of law in construing NGR r 92(3) and the application [by GGT] should be dismissed."²⁷¹

The Australian Competition Tribunal had previously considered the ERA's application of rule 92(3) of the NGR to true-up the reference tariffs of ATCO Gas following an interval of delay. In that instance, the Australian Competition Tribunal had also found that the ERA had not erred in its interpretation of rule 92(3) of the NGR.²⁷²

However the Commission notes that in the Supreme Court of Western Australia's decision, Le Miere J noted that:

“Rule 92(3) is relevantly ambiguous or obscure. The interpretations advanced by the applicant and the respondents are both reasonably open.”

On this basis, the Commission has concluded that the operation of the NGR in respect of the interval of delay warrants clarification for future access arrangements, as indicated in the draft report.

6.5.5 Final recommendation

Recommendation 13: Clarify the process for equalising revenue during the interval of delay

Clarify that:

- the process for equalising revenue during an interval of delay is to result in a service provider being no better or worse off as a result of the interval of delay
- the definition of the access arrangement period includes the period known as the interval of delay.

The proposed amendments are reflected in the drafting of amendments to the definition of access arrangement period in rule 3 and amendments to rule 92 of the NGR.

6.6 Regulatory discretion

6.6.1 Current framework

The NGL requires the regulator, in performing or exercising an economic regulatory function or power, to perform or exercise that function or power in a manner that will or is likely to contribute to the achievement of the NGO.²⁷³

Rule 40 of the NGR sets out three levels of discretion that apply to the regulator when making a decision on specified elements of the access arrangement proposal:

²⁷¹ Goldfields Gas Transmission Pty Ltd v ERA [2018] WASC 104.

²⁷² Application by ATCO Gas Australia Pty Ltd [2016] ACompT10.

²⁷³ Section 28(1) of the NGL.

- No discretion: The regulator's discretion is entirely excluded in regard to that element of the access arrangement if the proposal meets the requirements of the relevant provision. This applies to the access arrangement review date and access arrangement revision date (rule 50(2)).
- Limited discretion: The regulator may not withhold its approval of an element of the access arrangement if the regulator is satisfied that the element complies with the requirements of the NGL and NGR and is consistent with any applicable criteria in the NGL and NGR. The regulator's discretion is limited in relation to:
 - conforming capital expenditure (rule 79)
 - the depreciation schedule (rule 89)
 - operating expenditure (rule 91)
 - for distribution pipelines, the setting of tariff classes to allow service providers to recover the expected revenue (rule 94)
 - for transmission pipelines, the reference tariffs set to recover the portion of total revenue referable to the reference service (rule 95).
- Full discretion: The regulator may withhold its approval to the access arrangement element if in its opinion, a preferable alternative exists that complies with the requirements of the NGL and NGR and is consistent with any applicable criteria in the NGL and NGR. This applies to the remaining elements of an access arrangement not noted above.

6.6.2 Summary of draft report findings and draft recommendations

In the draft report, the Commission noted that the current framework may be preventing the regulators from making decisions on access arrangement proposals that best promote the NGO. Further that the current discretion framework is unclear and confusing and could impede regulatory decisions to best promote the NGO.²⁷⁴

The Commission recommended that the limited and no discretion regulatory framework be removed from the NGR.

²⁷⁴ AEMC, *Review into the scope of economic regulation applied to covered pipelines*, Draft report, 27 February 2018, pp. 91-96.

Draft recommendation 13: Remove the limited and no discretion regulatory framework

To remove the limited discretion and no discretion framework contained in rule 40 from the NGR.

6.6.3 Stakeholder submissions to draft report

There was broad support from stakeholder submissions for the removal of the limited and no discretion framework from the NGR.²⁷⁵ APGA expressed the view that the removal of the discretion framework largely reflects what happens in practice. In particular, ERA, PIAC and ACCC noted that removing the limits on the regulator's discretion should allow the regulators to make decisions that better achieve the NGO, as well as reducing the risk that service providers exert market power.²⁷⁶ No stakeholders made submissions against the draft recommendation.

However, ATCO noted the propose-respond model that is a feature of the Electricity Networks Access Code 2004 in Western Australia, which does not allow the regulator to reject a proposal that is compliant with the objective of the code.²⁷⁷

6.6.4 Commission analysis

Policy intent and history of the regulatory discretion framework in the NGR

The discretion framework was included in the NGR following findings from the Expert Panel on Energy Access Pricing:²⁷⁸

“In terms of the level of discretion given to the regulator through the Rules, this raises a number of conflicting objectives, particularly from the viewpoint of regulated entities. Prescription in the Rules promotes certainty and stability of regulatory outcomes. It also assists in promoting a transparent commercial and policy assessment of the regulatory approach, given the nature of the Rule making process that now applies under the NEL and that is to be included in the NGL. Conversely, a high level of prescription reduces the regulator’s ability to accommodate the particular circumstances of individual market participants in regulatory decisions.”

The Expert Panel on Energy Access Pricing concluded that a fit-for-purpose model of regulation should be applied to the energy regulatory regimes.²⁷⁹ The fit-for-purpose model of decision making comprises a combination of 'consider-decide' and 'propose-respond' to best achieve the NGO and NEO and the revenue and pricing principles:

²⁷⁵ Submissions to the draft report: ACCC, pp. 14-15; ERA, p. 2 & 9; AGL, p. 1, APGA, p. 7; EUAA, p. 1; PIAC, p.10.

²⁷⁶ Submissions to the draft report: ACCC, pp. 14-15; ERA, p. 2 & 9; PIAC, p.10.

²⁷⁷ ATCO, submission to the draft report, p.7.

²⁷⁸ Expert Panel on Energy Access Pricing, *Report to the Ministerial Council on Energy*, 13 April 2006, p. 26.

²⁷⁹ *ibid.*, pp. 59-60.

- consider-decide: the ultimate discretion for an aspect or the whole of a regulatory decision rests with the regulator within the guidance and limitations offered by the law. In this model, the regulator may prefer what it considers the best solution, value or mechanism rather than be limited by first needing a ground to reject the proposal of the service provider
- propose-respond: where the regulator's task is to assess a proposed aspect or the whole of a regulatory decision and is forced to accept the proposal where it is within the bounds defined by the rules. In this model the regulator cannot prefer what it considers a better outcome if the service providers proposal is compliant with the test in the rules.²⁸⁰

In effect, the Ministerial Council on Energy (MCE)'s subsequent adoption of the fit-for purpose model of decision making has enabled the Commission to determine how the regulator exercises its economic regulatory powers as it makes the rules.²⁸¹ The Commission increased the regulator's discretion in assessing electricity network service provider regulatory proposals under the NER through the National Electricity Amendment (Economic regulation of network service providers) Rule 2012. In doing so, the Commission stated:²⁸²

“The final rule provides the regulator with discretion to consider the changing circumstances of each NSP, and make decisions on a case by case basis so that the best outcomes can be achieved - at the same time, the regulator must do so in an accountable and transparent manner.”

Extent of the regulator's discretion under the NGR

Regardless of the level of discretion allowed under the NGR, the regulator's ability to make decisions or exercise its functions remains constrained by the application of administrative law.²⁸³ As the regulators (the ERA and AER) are government bodies, they are subject to the requirements of administrative law and this imposes a form of constraint on the regulators' exercise of discretion when making decisions.²⁸⁴

In addition, the gas pipeline regulatory framework sets out additional limitations or constraints on how the regulator can exercise its discretion when making decisions. The NGL provides an overarching constraint, in that the regulator must perform or exercise a function in a manner that will or is likely to contribute to the achievement of the NGO. Further, under the NGR, there are more detailed factors, criteria and principles that

²⁸⁰ Nicolas P, *Administrative Law in the Energy Sector: Accountability, Complexity and Current Developments*, Australian Institute of Administrative Law Forum, No.59, Vol. 73, 2008, p. 82.

²⁸¹ *ibid.*, pp. 82-83.

²⁸² AEMC, *Economic regulation of network service providers, rule determination*, 29 November 2012, p. 10.

²⁸³ Administrative law is a set of principles contained in both court decisions and legislation. It sets out how administrative decision makers must make decisions and provides affected parties with a way to challenge those decisions.

²⁸⁴ Criteria for making a valid decision include: where does the power to make the decision come from (head of power); appropriate exercise of discretion; authorisation to make the decision; procedural fairness; preconditions to a decision; consideration of all relevant matters and evidence; correctly recorded decisions (Law Institute of Victoria, *A user's guide to administrative decision making*, 2013).

place a constraint on how the regulator can make decisions regarding specific elements of an access arrangement proposal.

Interaction of the regulatory discretion framework with the NGL

Stakeholders²⁸⁵ have indicated that there may be some ambiguity surrounding the link between the regulatory discretion framework in the NGR and the manner in which the regulator must perform or exercise its regulatory functions or powers under the NGL.²⁸⁶ The AER in particular suggested that the discretion framework be removed as the limited discretion framework has constrained it from challenging proposals made by the service provider.²⁸⁷ In discussions with the AEMC, the ERA expressed support for this change.

Section 28 of the NGL provides that in making an access arrangement decision where there are two or more decisions that will or are likely to contribute to the NGO, the regulator must make the decision that it is "satisfied will or is likely to contribute to the achievement of the NGO to the greatest degree."²⁸⁸

"(1) The AER must, in performing or exercising an AER economic regulatory function or power -

(a) perform or exercise that function or power in a manner that will or is likely to contribute to the achievement of the national gas objective; and

(b) if the AER is making a designated reviewable regulatory decision -

...

(iii) if there are 2 or more possible designated reviewable regulatory decisions that will or are likely to contribute to the achievement of the national gas objective -

(A) make the decision that the AER is satisfied will or is likely to contribute to the achievement of the national gas objective to the greatest degree (the preferable designated reviewable regulatory decision); and

(B) specify reasons as to the basis on which the AER is satisfied that the decision is the preferable designated reviewable regulatory decision."

However, it is difficult for the regulator to make a more preferable designated reviewable regulatory decision on the overall access arrangement under s. 28(1)(b)(iii) of the NGL where it is prevented, in respect of an element of the access arrangement, from making a decision that better meets the NGO.

While there may not be a direct conflict between rules 40(1) and (2) of the NGR and s. 28(1)(b)(iii) of the NGL, the limited discretion framework created by rule 40 does not sit well with the operation of s. 28(1)(b)(iii) of the NGL. In other words, a tension arises

²⁸⁵ Submissions to the issues paper: Jemena, p. 3; EUAA, p. 2; MEU, p. 18; PIAC, p. 17; AER, pp.10-11. The issue was also discussed at the AEMC's workshop on 14 December 2017.

²⁸⁶ Section 28(1)(b)(iii)(A) of the NGL.

²⁸⁷ This matter of removing the regulatory discretion framework was discussed at the December 2017 AEMC stakeholder workshop and was generally supported. See also: AER, submission to the issues paper, pp. 10-11.

²⁸⁸ Section 28(1)(b)(iii)(A) of the NGL.

because it is difficult for the regulator to give full effect to s. 28 (that is to make a preferable designated reviewable regulatory decision on the overall access arrangement) if it is hampered in its discretion to make decisions on the individual elements of the access arrangement.

Under the NGR, for full discretion provisions, rule 40(3) provides that the regulator has discretion to withhold its approval to an element of an access arrangement proposal, if in the regulator's opinion, a preferable alternative exists that:

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

The tension that arises with limited and no discretion provisions does not arise in relation to full discretion provisions, as an alternative decision can clearly be contemplated by the regulator. However in practice, the regulator's discretion is always limited in the sense that its decision making, even for full discretion provisions, is guided by some set of factors or principles that ultimately place a form of constraint on its decision making power. For example, even for full discretion provisions, there are specific criteria set out in the relevant rules, as well as the overarching requirement to have regard to the NGO, that operate to 'limit' the regulator's discretion.

Consistency of the discretion framework with the NER and other parts of the NGR

Chapters 6 and 6A of the NER set out the framework for economic regulation of electricity distribution and transmission network businesses, respectively. Under the NER, there is not a framework similar to that set out in rule 40 of the NGR which explicitly defines categories of discretion (no discretion, limited discretion and full discretion). As discussed above, under the NER the regulator has the discretion to make decisions appropriate to the circumstances of network service providers in assessing regulatory proposals, subject to addressing the relevant factors and considerations set out in the NER.²⁸⁹

However, the NER includes an overall framework that provides a similar 'spectrum of discretion.' That is, there are clauses that limit the AER's discretion by providing factors and criteria that the AER must take into account with approving certain elements of a revenue proposal. For example, there are provisions that set out matters that the AER must approve or reject if certain requirements are met.²⁹⁰ These requirements have a similar effect, in practice, to the relevant criteria set out in each relevant rule of the NGR. Importantly, the approach taken with the NER is also consistent with the Expert Panel's suggestion (noted above) that a 'fit-for-purpose' model to energy regulatory regimes be used.

²⁸⁹ AEMC, *Economic regulation of network service providers, rule determination*, 29 November 2012, p. 32.

²⁹⁰ For example, see clauses 6.12.3 and 6A.14.3 of the NER.

Conclusion

The Commission considers that:

- as a matter of principle, the regulator should not be prevented from making a decision on an access arrangement proposal that best promotes the NGO, having regard to all the relevant factors, criteria and principles in the NGL and NGR
- the effect of the current regulatory discretion framework is unclear and confusing and could impede regulatory decisions to best promote the NGO.

On this basis, the Commission considers that no individual rules in the NGR should be identified as 'no' or 'limited' discretion provisions. All decisions made by the regulators in regard to the elements of an access arrangement proposal, and the access arrangement proposal in total, should be 'full' discretion decisions subject to the relevant requirements.²⁹¹ This provides a decision making framework where the regulator is to assess any element of an access arrangement with reference to particular criteria relevant to the element.

The Commission considers that this is consistent with a propose-respond model, and that the regulator will only refuse to approve a proposal if it did not satisfy the NGO and the relevant rules.

The Commission's final recommendation is unchanged from its draft recommendation.

The Commission has considered whether consequential amendments to the drafting of the each rules previously identified as either a limited or no discretion rule are required so that appropriate guidance for decision making is provided to the regulators. No consequential amendments have been identified.

6.6.5 Final recommendation

Recommendation 14: Remove the limited and no discretion regulatory framework

Remove the limited discretion and no discretion framework from the NGR.

The proposed amendments are reflected in the omission of rule 40 of the NGR (as well as amendments to rules 50, 79(6), 89(3), 91(2), 94(6) and 95(4) of the NGR).

²⁹¹ As discussed in Chapter 5, the Commission has made a recommendation to amend rule 50 of the NGR (review of access arrangements) to allow service providers to fix a revision commencement date (and corresponding review submission date) to suit the business, with the approval of the regulator.

7 Determining efficient costs

Box 7.1 Summary of findings and recommendations

The accurate determination of efficient costs is key to the setting of efficient reference tariffs. Efficient, cost reflective reference tariffs are required to enable the efficient use and provision of reference services as well as efficient investment in the pipeline.

A number of issues have been raised by stakeholders that go to the determination of efficient costs for full regulation pipelines. These issues relate to the assessment of capital and operating expenditure, the determination of the capital base, including the application and meaning of depreciation in this context. The Commission has also considered concerns regarding the operation of the cost allocation and rebateable services rules.

The Commission has made a number of recommendations to address these issues. The recommendations are set out in this chapter and include:

- clarification that the new capital expenditure criteria require that the prudent service provider requirement must always be satisfied
- that the rate of return for speculative capital expenditure should be at least that implicit in the relevant reference tariff
- requiring the use of the capital base calculation rules to determine the value of existing expansions and extensions that are to be included in the capital base of full regulation pipelines
- require the regulators to determine an initial capital base for light regulation pipelines where such a valuation does not already exist
- require a dispute resolution body to use a capital base valuation determined by the regulator
- amend the capital and operating expenditure requirements to clearly require service providers to carry out a cost allocation between covered and uncovered assets
- remove the requirement that a rebateable service must be in a separate market to a reference service and introduce a requirement that where relevant, the reference tariff variation mechanism of an access arrangement must allow the reduction of the reference tariff in line with the rebateable service revenue.

In response to stakeholder concerns about the draft recommendation to amend the definition of depreciation to "economic depreciation," the Commission has concluded that the current NGR provisions provide discretion to the regulators to select the best depreciation methodology in the determination of an initial opening capital base on a case by case basis.

The revenue and pricing principles in the NGL set out that a service provider should be provided with a reasonable opportunity to recover the efficient costs of providing the reference services.²⁹² The revenue and pricing principles also state that the service provider should be provided with incentives to promote economic efficiency with respect to reference services, which includes efficient investment, efficient provision of pipeline services and efficient use of the pipeline.

Reference tariffs are set based on efficient costs of a prudent service provider acting in accordance with good industry practice and forecast demand to deliver efficient total revenue that is calculated using the building block approach.²⁹³ The simplified steps in calculating a reference tariff are set out in Figure 7.1 below along with the relevant rules.²⁹⁴

Figure 7.1 Simplified calculation of a reference tariff

Step 1: calculate total revenue

Total revenue = (rate of return x *projected capital base*) + depreciation on *projected capital base* + estimated income tax + increments/decrements from incentive mechanism + forecast operating expenditure

(see rules 76, 87, 87A, 88-90, 91, 98)

given that:

Projected capital base = *opening capital base* + conforming forecast capital expenditure – forecast depreciation for the period – forecast disposals

(see rules 78, 79, 88-90)

and

Opening capital base = opening capital base of previous access arrangement period + approved capital expenditure + adjustments for capital contributions, speculative capital expenditure and former redundant assets – depreciation over the previous access arrangement period – redundant assets – disposals

(see rules 77, 79, 82, 84, 86)

Step 2: allocation

Allocate *total revenue* between reference services and non-reference services (see rule 93).

Step 3: reference tariffs

Calculate reference tariffs by dividing relevant *total revenue* by forecast demand for the relevant reference service.

A reference tariff is calculated by dividing the total revenue allocated to the reference service by the forecast demand for the reference service. Total revenue is calculated as the sum of the allowed return on the projected capital base, depreciation, estimated corporate income tax and operating expenditure, plus or minus any adjustments for the incentive mechanism as approved by the regulator.²⁹⁵

²⁹² Section 24 of the NGL.

²⁹³ Rule 76 of the NGR.

²⁹⁴ This example is simplified as it assumes a single reference tariff for a single year (the first year of an access arrangement period) for a pipeline that has a previous access arrangement period. In reality, regulators may approve reference tariffs for multiple services over multiple years and in cases where there may or may not be an access arrangement already in place. More details of the alternative methods for calculating capital bases are discussed below.

²⁹⁵ Rule 76 of the NGR.

This chapter sets out the current framework, analyses key issues and provides recommendations for the determination of efficient costs that are used to calculate reference tariffs. It covers:

- capital and operating expenditure
- capital base
- depreciation
- cost allocation
- rebateable services.

7.1 Capital and operating expenditure

7.1.1 Current framework

Conforming and approved capital expenditure

Capital expenditure is assessed ex-ante and ex-post by the regulator:

- ex-ante: At the beginning of an access arrangement period, the regulator determines whether projected capital expenditure for that period is 'conforming'.
- ex-post: Prior to the start of the next access arrangement period, the regulator determines whether actual capital expenditure for the current period is 'approved'. Approved capital expenditure is rolled into the opening capital base and is included in the calculation of total revenue and reference tariffs for the next and subsequent access arrangement periods.

To be assessed as conforming or approved by the regulator, capital expenditure must satisfy the criteria that are set out in rule 79 of the NGR. This test has multiple limbs.

First, the capital expenditure in question 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 pipeline services.²⁹⁶

Second, projected and actual capital expenditure must be 'justifiable' under one of the following criteria to be assessed as either 'conforming' or 'approved':²⁹⁷

- the overall economic value of the expenditure is positive
- the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the capital expenditure
- the capital expenditure is necessary to:
 - maintain and improve the safety of services, or
 - maintain the integrity of services, or
 - comply with a regulatory obligation or requirement, or
 - maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred.

²⁹⁶ Rule 79(1)(a) of the NGR.

²⁹⁷ Rules 79(1)(b) and 79(2) of the NGR.

This rule is currently applied by the regulator with limited discretion.²⁹⁸

Advance determinations

Rule 80 of the NGR allows the regulator to make a determination in advance that if capital expenditure were to be made in accordance with the service provider's proposal and as specified in the determination, then that expenditure will meet the new capital expenditure criteria in rule 79 of the NGR.

An advance determination is binding on the regulator. However, not making an advance determination does not mean that the expenditure will not meet the new capital expenditure criteria in the future.

This rule has not been utilised since the NGR commenced.

Surcharges

If a service provider undertakes non-conforming capital expenditure,²⁹⁹ it may notify the regulator that it proposes to recover the amount, in full or in part, through a surcharge.³⁰⁰ A surcharge is in addition to a reference tariff, or another tariff, which is levied on users of incremental services.

The regulator must only approve a surcharge if the amount recovered from the surcharge in net present value terms is equal to or less than the amount of non-conforming expenditure that 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 services.

Capital expenditure recovered by means of a surcharge can never be rolled into the capital base as this would result in the recovery of the non-conforming capital cost through reference tariffs.

This rule has not been utilised since the NGR commenced.

Speculative capital expenditure

The NGR allows for the creation of a speculative capital expenditure account.³⁰¹ It is possible that capital expenditure that was not conforming at the time of the regulator's assessment could be approved subsequently due to demand or service changes. A full access arrangement can allocate non-conforming capital expenditure to a speculative capital expenditure account. If as a result of changes to demand or services the capital expenditure would be approved, the relevant portion of the speculative capital expenditure account (including a return that is approved by the regulator) can be rolled into the capital base at the commencement of the next access arrangement period. This would then allow the capital cost to be recovered through reference tariffs in the future. This rule has not been utilised since the NGR commenced.

²⁹⁸ Rule 79(6) of the NGR. See Chapter 6 for recommendations on regulatory discretion.

²⁹⁹ Rule 81 of the NGR.

³⁰⁰ Rule 83 of the NGR.

³⁰¹ Rule 84 of the NGR.

Capital contributions

Capital expenditure can also be fully or partially funded by users through capital contributions. The regulator may allow the capital expenditure to which capital contributions have been made to be rolled into the capital base. Regulatory approval to include such capital expenditure in the capital base is subject to the access arrangement including a mechanism so that the service provider cannot benefit from the capital contributions made through increased revenue.³⁰²

This rule has not been utilised since the NGR commenced.

Redundant assets

The NGR allow for an access arrangement to include a mechanism to remove from the capital base assets that cease to contribute to the delivery of pipeline services.³⁰³ A mechanism for sharing the costs associated with a decline in demand for pipeline services between the service provider and users may also be included in the access arrangement.³⁰⁴

This rule has not been utilised since the NGR commenced.

Operating expenditure

Operating expenditure is assessed once by the regulator (ex-ante). Prior to the start of an access arrangement period, the regulator determines whether forecast operating expenditure for the forthcoming period is approved and is to be included in the building block approach to the calculation of total revenue.

To be approved, rule 91 states that operating expenditure must be at a level that 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 services. This is currently a limited discretion provision.³⁰⁵

7.1.2 Summary of draft report findings and draft recommendations

In its draft report, the Commission concluded that there was some ambiguity in the NGR in relation to the new capital expenditure criteria in relation to safety, and the allowed return for speculative capital expenditure:

- New capital expenditure safety criterion: rule 79(1) requires that expenditure that is necessary to maintain and improve the safety of services, must also be assessed as expenditure incurred by a prudent service provider acting efficiently in order to be assessed as conforming capital expenditure. However, the regulators indicated that they considered that the new capital expenditure criteria have constrained their ability to address the efficiency of capital expenditure if it meets the safety criterion in rule 79(2)(c)(i) of the NGR. Although the Commission noted the proper interpretation of rule 79(1) is that it is to be read conjunctively, it made

³⁰² Rule 82 of the NGR.

³⁰³ Rule 85 of the NGR. If the redundant assets later contribute to the delivery of pipeline services, the assets may be treated as new capital expenditure (rule 86 of the NGR).

³⁰⁴ Rule 85 of the NGR.

³⁰⁵ See Chapter 6 for recommendations on regulatory discretion.

a draft recommendation that rule 79(1) should be amended to insert the word “and” in rule 79 between subrules 79(1)(a) and 79(1)(b) to make it clear that regardless of which subrule (2) criteria are relevant for the purposes of subrule 79(1)(b), the expenditure in question must also meet the prudence criterion under rule 79(1)(a).

- Speculative capital expenditure: the framework under rule 84 should balance encouraging efficient speculative capital expenditure and deterring the service provider from taking risk that creates inefficient costs for users. The key issue for the speculative capital expenditure account rule as it is currently worded is the lack of clarity on the rate of return that would apply. Rule 84(2) sets out that the return may be, but need not be, the rate of return used to determine the reference tariff. Thus, the return could be above or below the rate of return used to determine the reference tariff. However, the appropriate rate of return will likely be specific to the particular investment project and its level of risk. For this reason, some discretion is needed for the regulator to decide on the rate of return that will apply in a particular circumstance. The Commission's draft recommendation was that rule 84 be clarified such that the rate of return under rule 84(2) is at a minimum the return used to calculate the reference tariff but that this could be adjusted upwards if the regulator deemed it was appropriate having regard to the speculative nature of the particular investment.

As a result, the following draft recommendations were made.

Draft recommendation 14: Clarify the application of the new capital expenditure criteria

To insert the word “and” in rule 79 between subrules 79(1)(a) and 79(1)(b) to make it clear that regardless of which subrule (2) criteria are relevant for the purposes of subrule 79(1)(b), the expenditure in question must also meet the prudence criterion under rule 79(1)(a).

Draft recommendation 15: Provide guidance on the allowed return for speculative capital expenditure

To clarify that the rate of return to be applied to speculative capital expenditure under rule 84 of the NGR is, at a minimum, the return implicit in the reference tariff but that this could be adjusted upwards if the regulator deemed it was appropriate having regard to the circumstances of the particular investment.

The draft report also included assessments of other aspects of the capital and operating expenditure framework. No changes to the NGR were recommended in relation to these topics, as follows:

- Unspent conforming capital expenditure. A few stakeholders raised concerns that some service providers do not spend all the conforming capital expenditure during an access arrangement period. In addition, there was some concern that in such situations, a service provider is allowed a return on the unspent capital expenditure during the access arrangement period as the conforming capital expenditure is included in the projected capital base. However, the Commission noted that the NGR should retain the incentive for a service provider to deliver more efficient outcomes through reducing or altering its actual capital

expenditure from the proposed projected capital expenditure. This is part of the incentive-based framework applied to the regulation of pipelines.

- Contingent project mechanism. The AER had suggested that the inclusion of a contingent project mechanism, similar to that available to electricity network service providers under the NER, be considered as an inclusion to the NGR. In considering this, the Commission found that there are a range of mechanisms already open to the regulators to achieve a similar result. These include the making of advance determinations (under rule 80), that service providers can make non-conforming expenditure and recover this through surcharges (rule 83), and that the speculative capital expenditure account can be used (rule 84). For these reasons, the Commission concluded that the addition of a contingent project mechanism to the NGR was not required.
- Capital expenditure for service reliability. AEMO had suggested that the capital expenditure criteria be amended to accommodate expenditure required to meet a reliability standard. Noting that the setting of pipeline reliability standards is a matter for state and territory governments under the Australian Energy Market Agreement, the Commission expressed its willingness to assist governments in this work in the future if requested. In regard to the criteria specified in rule 79 of the NGR, the Commission concluded that capital expenditure relating to service reliability can already be assessed under rule 79(2)(c)(ii) which refers to maintaining the integrity of services. In addition, if any government specified a reliability standard in the future, this would be captured under rule 79(2)(c)(ii) as it would be "an obligation to comply with a regulatory obligation or requirement". As a result, no changes to the NGR were recommended in relation to this issue.
- Operating expenditure. No issues were raised in relation to rule 91 of the NGR. The Commission concluded that the rule did not require any amendment (with the exception of removing the limited discretion nature of the rule).

7.1.3 Stakeholder submissions to draft report

There was support for the Commission's draft recommendation to clarify the application of the new capital expenditure criteria by those stakeholders who commented on it in submissions.³⁰⁶ APA noted that the Commission's draft recommendation reflects current practice and that "there has never been any doubt amongst either regulators or service providers." APA also suggested this change is minor enough to be dealt with in the minor gas rule change in 2019.³⁰⁷

Similarly, there was support for the Commission's draft recommendation to provide guidance on the allowed rate of return for speculative capital expenditure by those stakeholders who commented on it, although several stakeholders expressed concern with how the recommendation would be applied in practice. Specifically:

³⁰⁶ Submissions to the draft report: APGA, p. 7; ERA, p. 8; PIAC, p. 12.

³⁰⁷ APA, submission to the draft report, p. 28.

- The MEU considered that there should be further guidance in the rules around how the draft recommendation would be applied, such as the risk allowances that the regulator should be required to incorporate in the higher rate of return.³⁰⁸
- The ERA supported the draft recommendation subject to a suggested amendment to clarify that the rate of return applied to speculative investment is the return implicit in the reference tariff, unless adjusted upwards if the regulator determined it was appropriate, having regard to the circumstances of the investment.³⁰⁹
- PIAC queried how the draft recommendation would interact with the binding rate of return guidelines.³¹⁰
- APA supported recognition of the uncertainty related to speculative capital expenditure, but noted that the regulated rate of return is unlikely to be sufficient to attract this type of higher risk investment.³¹¹

On other aspects related to determining efficient costs, EnergyAustralia reiterated its concerns regarding unspent capital expenditure. It considered there should be further assessment of unspent capital expenditure than is currently allowed by the rules. It suggested that in cases where a project does not proceed, the regulator should assess the reasons. Where a service provider has undertaken alternative investment or taken actions to defer the need for investment, financial reward would be appropriate. However, if the decision to defer investment is not justified, EnergyAustralia considered that it would be unreasonable and inappropriate to charge customers for the investment that is not made. This is because the unspent investment allowance results in higher costs for customers with no additional benefit.³¹² The EUAA also noted that the incentive for service providers to overstate capital expenditure requirements should not be underestimated. The EUAA considered that the draft recommendations around increased stakeholder engagement in the access arrangement process will allow for greater scrutiny of capital expenditure proposals.³¹³

While the AEMC did not make a draft recommendation to introduce a contingent project mechanism similar to that in the NER, the introduction of such a mechanism was still supported by the EUAA. It considered these mechanisms are useful in assessing projects where there is uncertain future demand, and noted they are increasingly being used by electricity networks. If introduced into the gas regulatory framework, the EUAA suggested some improvements to the electricity mechanism such as tightening the triggers under which a project is approved and increasing consumer engagement in the evaluation process.³¹⁴

308 MEU, submission to the draft report, p. 16.

309 ERA, submission to the draft report, p. 8.

310 PIAC, submission to the draft report, pp. 11-12.

311 APA, submission to the draft report, pp. 28-29.

312 EnergyAustralia, submission to the draft report, p. 3.

313 EUAA, submission to the draft report, p. 4.

314 *ibid.*, p. 4.

7.1.4 Commission analysis

Unspent conforming capital expenditure

Some stakeholders have raised concerns that some service providers do not spend all the conforming capital expenditure during an access arrangement period.³¹⁵

Submissions to the issues paper focussed on unspent conforming capital expenditure related to the Brooklyn compressor station on the Victorian Declared Transmission System (DTS). APA carried out other capital expenditure that it considered to be more prudent. Some DTS users disagreed with APA's decision, and considered that the proposed forecast conforming capital expenditure would have better addressed the constraint issues in the DTS.

In addition to the above specific issues, stakeholders raised two broader concerns in relation to unspent conforming capital expenditure:³¹⁶

- service providers may deliver actual capital expenditure that provides an inferior outcome to the proposed capital expenditure
- reference tariffs over the access arrangement period include a return on unspent conforming capital expenditure.

The NGL and NGR have been designed to provide an incentive-based framework for gas pipeline service providers. For capital expenditure assessment, this has meant that the framework allows the service provider to adjust actual capital expenditure from that assessed as conforming by the regulator during the access arrangement period, and as such:

- allows service providers to benefit from any reduction in capital expenditure between conforming capital expenditure at the beginning of the period and approved capital expenditure at the end of the period, through earning a return on the expenditure differential in the projected capital base for the access arrangement period
- imposes on service providers the cost of any overspend in capital expenditure that is not conforming at the beginning of the access arrangement period nor approved at the end of the period
- enables the service provider to propose more efficient capital expenditure for approval at the end of the access arrangement period.

The Commission considers that it is important that the NGR retain the incentive for the service provider to deliver more efficient outcomes through altering its actual capital expenditure from the proposed projected capital expenditure. The benefits of these efficiencies are shared with consumers, with the reduced capital expenditure taken account of in reduced reference tariffs in subsequent access arrangements.³¹⁷

³¹⁵ Lochar et al, submission to the issues paper, p. 1.

³¹⁶ AGL, submission to the issues paper, p. 2; EnergyAustralia, submission to the draft report, p. 3.

³¹⁷ To further encourage efficiencies, rule 98 of the NGR (incentive mechanisms) permits revenue allowance changes in the following access arrangement periods to reflect the sharing of capital expenditure efficiency gains or losses. These have been used recently by the AER in AusNet Services Gas access arrangement 2018 to 2022, November 2017.

As for the concern that service providers are allowed a return on unspent capital expenditure during an access arrangement period, this is a fundamental feature of incentive regulation. Service providers are unlikely to reduce expenditure unless they receive some share of the benefits that arise from doing so. Although service providers are allowed a return for a short period, the underspend leads to lower tariffs for users in the long term.

As highlighted by the EUAA,³¹⁸ there is an incentive for service providers to try to overstate projected capital expenditure in order to benefit from the return on and of the unspent capital expenditure up to the start of the next access arrangement period. However, regulators are aware of this risk when assessing projected capital expenditure and often approve a lower amount of expenditure that they consider satisfies the relevant criteria than that proposed by the service provider. As such, the Commission does not propose to change its position from the draft report and has not made a recommendation to amend the NGR in relation to unspent capital expenditure.

Contingent project mechanism

The AER suggested that the inclusion of a contingent project mechanism, similar to that available to electricity network service providers under the NER, be considered.³¹⁹ The purpose of adopting this approach would be to reduce the discrepancy between a service provider's proposed projected and actual capital expenditure. A contingent project mechanism would introduce triggers to approve specified capital expenditure. Such an approach was supported by the EUAA, which considers these mechanisms are useful in assessing projects where there is uncertain future demand.³²⁰

However, in consultation with stakeholders including the ERA and AER, the Commission has concluded that the NGR does not prevent a contingent project type mechanism from being applied to full regulation pipelines. This is because there are a range of mechanisms already open to the regulators to achieve a similar result. For example, making an advance determination (rule 80), the ability of service providers to make nonconforming expenditure but potentially recover through surcharges (rule 83) and use of the speculative capital expenditure account (rule 84). For this reason, the Commission does not propose to change its position from the draft report. It does not recommend an amendment to the NGR to include a contingent project mechanism similar to that in the NER.

Speculative capital expenditure

Some service provider stakeholders have expressed concern about the operation of the speculative capital expenditure provisions in the NGR.³²¹ Particularly in response to the Commission's issues paper:

³¹⁸ EUAA, submission to the draft report, p. 4.

³¹⁹ AER, submission to the issues paper, p. 13. See rules 6.6A and 6A.8 of the NER.

³²⁰ EUAA, submission to the draft report, p. 4.

³²¹ Submissions to the issues paper: DBP and AGN, p. 24; APA, p. 23; APA, submission to the draft report, pp. 28-29.

- DBP and AGN noted that rule 84 on speculative capital expenditure is ambiguous on whether the allowed rate of return on speculative capital expenditure would be commensurate with the risk of the investment.³²²
- APA suggested that as a result, the rule does not provide an incentive to finance speculative investment.³²³

Rule 84(2) of the NGR states that the rate of return may, but need not be, the rate of return used to determine the reference tariff. It does not provide guidance that the return, for example, should be commensurate with the risk of the expenditure so as to attract financing.

The Commission considers that, in relation to speculative capital expenditure, the framework should balance encouraging efficient speculative capital expenditure and deterring the service provider from taking risk that creates inefficient costs for users.

The key issue for the speculative capital expenditure account rule as it is currently worded is the lack of clarity on the rate of return that would apply. Rule 84(2) sets out that the return may be, but need not be, the rate of return used to determine the reference tariff. This allows the return to be above or below the rate of return used to determine the reference tariff.

However, the appropriate rate of return will likely be specific to the particular investment project and its level of risk. Accordingly, it would not be appropriate for the NGR to be too prescriptive on the rate of return that should be applied in all speculative capital expenditure scenarios. Some discretion on deciding the rate of return is needed.

Given the speculative nature of the investment project, the allowed rate of return would be unlikely to provide a return sufficient for the service provider to undertake the investment. As noted by APA in response to the draft report, the regulated rate of return is unlikely to attract higher risk investments by service providers.³²⁴ This is relevant to the regulator's determination of the rate of return for a specific speculative capital expenditure.

Accordingly, NGR should be amended to provide greater certainty on the rate of return that can be set by a regulator for speculative capital expenditure while still allowing the regulator the flexibility to reflect, where appropriate, the specific circumstances of speculative investment. This approach is generally supported by stakeholders.³²⁵

Given the uncertain nature of these investments, the Commission does not consider that any additional requirements, such as factors that should be considered by the regulator in setting the allowed rate of return as suggested by the MEU, should be incorporated into the NGR.³²⁶ Similarly, the Commission does not recommend changes to the NGR to establish the determination of the speculative capital expenditure rate of return in

³²² DBP and AGN, submission to the issues paper, p. 24.

³²³ APA, submission to the issues paper, p. 23.

³²⁴ APA, submission to the draft report, pp. 28-29.

³²⁵ Submissions to the draft report: APA, pp. 28-29; ERA, p. 8; MEU, p. 16.

³²⁶ MEU, submission to the draft report, p. 16

light of the proposed rate of return instrument currently under consideration.³²⁷ However, additional guidance on the interaction of the rate of return instrument and the rate of return for speculative capital expenditure can be provided by the regulators in the future if they consider it appropriate.

Given this, the Commission does not propose to change its position from the draft report and recommends that rule 84 be clarified such that the rate of return under rule 84(2) is at a minimum the return used to calculate the reference tariff but that this could be adjusted upwards if the regulator deemed it was appropriate having regard to the speculative nature of the particular investment. In preparing the drafting of a rule that meets this recommendation, the Commission has had regard to the ERA's suggestions noted above.

New capital expenditure criterion

There has been some stakeholder concern regarding various aspects of the new capital expenditure criteria on the integrity and safety of pipeline services. These concerns are discussed in turn.

Reliability criterion

AEMO has suggested that in order for there to be clarity on the application of the new capital expenditure criteria under rule 79(2)(c) of the NGR, there needs to be a reliability standard. AEMO's comments particularly focus on the Victorian DTS where it considers that a reliability standard would not only clarify whether expenditure met the criteria in rule 79 but also aid in the coordination of investment between the transmission and distribution pipelines.

Relevantly, the Victorian Government has initiated a review into the electricity and gas safety framework.³²⁸ The review's interim report recommended the introduction of a reliability standard for gas and that the Victorian Government seek AEMC assistance in developing a framework for the standard.³²⁹

The Australian Energy Market Agreement sets out that the states and territories retain responsibility for setting service reliability standards for electricity distribution networks and gas pipelines.³³⁰ However, the Commission would support and participate in further investigation of this issue with the Victorian Government and other state governments as requested.

In addition, the Commission has assessed whether the new capital expenditure criteria under rule 79(2)(c) of the NGR should be amended to include a new criterion for reliability in the same way as the rule currently references safety of services. In considering this, the Commission has concluded that capital expenditure relating to service reliability can already be assessed under rule 79(2)(c)(ii) which refers to maintaining the integrity of services. In addition, should the outcome of the Victorian Government safety and reliability framework inquiry result in a reliability standard

³²⁷ PIAC, submission to the draft report, pp. 11-12.

³²⁸ A final report was submitted to the Victorian Minister for Energy in December 2017. This report has not yet been published.

³²⁹ Review of Victoria's Electricity and Gas Network Safety Framework, Interim Report, October 2017.

³³⁰ Notice of Amendment to the Australian Energy Market Agreement, Annexure 2, 9 December 2013.

requirement, expenditure needed to meet this requirement would be captured under rule 79(2)(c)(ii) as it would be 'an obligation to comply with a regulatory obligation or requirement'. Other state government requirements would similarly satisfy this criterion.

Accordingly, the Commission does not propose to change its position from the draft report that no amendments to the new capital expenditure criteria in the NGR are required to permit expenditure required for reliability purposes to be assessed by the regulator.

Safety criterion

The regulators have indicated that they consider that the new capital expenditure criteria have constrained their ability to address the efficiency of capital expenditure if it meets the safety criterion in rule 79(2)(c)(i) of the NGR.³³¹

For capital expenditure to be conforming, it must be expenditure that:

- would be incurred by a prudent service provider acting efficiently (under rule 79(1)(a) of the NGR)
- must also be justifiable (under rule 79(1)(b) of the NGR) in that it meets at least one of the criteria in rule 79(2) (that is, overall economic value is positive; net present value is positive; safety, integrity, regulatory requirement; or to meet demand).

Although neither “and” nor “or” is used between subrules (1)(a) and (1)(b), the Commission considers the proper interpretation of rule 79(1) is that it is to be read conjunctively given the lead in words in (1) “conforms with the following criteria.” This interpretation is supported by stakeholders.³³² Further, APA stated in its submission to the draft report that this approach reflects current practice and that “there has never been any doubt amongst either regulators or service providers”.³³³

Nonetheless, the Commission considers that it is worth removing any doubt on this issue. The Commission recommends the insertion of the word “and” at the end of rule 79(1)(a) to be clear that all expenditure, regardless of which criteria it meets in subrule (2), must also meet subrule (1)(a). Specifically, that all new capital expenditure must be such that 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 services.

As set out in Chapter 6 of this final report, the Commission has recommended removing the limited regulatory discretion framework created by rule 40 of the NGR. As a result, limited discretion will no longer apply to the assessment of new capital expenditure.

³³¹ For example, see the ERA process for the MidWest to South West Distribution Systems 2014 -2019 access arrangement and in particular the submissions from Energy Safety WA. See <https://www.erawa.com.au/gas/gas-access/mid-west-and-south-west-gas-distribution-systems/access-arrangements/access-arrangement-for-period-2014-2019>.

³³² Submissions to the draft report: APGA, p. 7; ERA, p. 8; PIAC, p. 12.

³³³ APA, submission to the draft report, p. 28.

Operating expenditure

The assessment of operating expenditure rule is simple, clear and succinct and no substantial issues (with the exception of the rule being of limited discretion) have been raised by stakeholders in either submission period during this review process. Rule 91 is the only rule in the NGR relating to the assessment of operating expenditure. As noted in Chapter 6, the Commission has recommended that limited discretion be removed from this rule (and all other limited discretion rules). No other changes are proposed to the operating expenditure framework.

7.1.5 Final recommendations

Recommendation 15: Provide guidance on the allowed return for speculative capital expenditure

Clarify that the rate of return to be applied to speculative capital expenditure is, at a minimum, the return implicit in the reference tariff but that this could be adjusted upwards if the regulator deemed it was appropriate having regard to the circumstances of the particular investment.

The Commission's recommendation is reflected in the draft amendments to rule 84 of the NGR.

Recommendation 16: Clarify the application of the new capital expenditure criteria

Insert the word “and” in rule 79 between subrules 79(1)(a) and 79(1)(b) to make it clear that regardless of which subrule (2) criteria are relevant for the purposes of subrule 79(1)(b), the expenditure in question must also meet the prudence criterion under rule 79(1)(a).

The Commission's recommendation is reflected in the draft amendments to rule 79(1) of the NGR.

7.2 Capital base

7.2.1 Current framework

Capital base for full regulation pipelines

The initial opening capital base for a newly covered pipeline is determined under rule 77(1) of the NGR and is dependent on the date of commissioning of the pipeline:

- for a covered pipeline commissioned before the commencement of the NGR in 2008: the opening capital base is determined with reference section 8.10 of the code,³³⁴ which states that the regulator should take into account, among a number of other factors:

“the basis on which tariffs have been (or appear to have been) set in the past, the economic depreciation of the Covered Pipeline and the historical returns to the Service Provider from the Covered Pipeline.”
- for a covered pipeline commissioned after the commencement of the NGR: the opening capital base is determined as the cost of construction of the pipeline and

³³⁴ *National third party access code for natural gas pipeline systems, 1997.*

pipeline assets incurred before commissioning of the pipeline (including easement and real property costs), plus the amount of capital expenditure since the commissioning of the pipeline, less depreciation and disposed assets.

For a full regulation pipeline, the initial capital base calculation occurs only once. Under rule 77 there is an ongoing regulatory process where the initial opening capital base is rolled forward and the opening capital base is calculated at the beginning of each access arrangement period. The approach is set out in rule 77(2) as:

- the opening capital base as at the commencement of the earlier access arrangement period
- plus approved capital expenditure made during the earlier access arrangement period plus any amounts to be added to the capital base due to speculative expenditure account, capital contributions and surcharges
- less depreciation over the earlier access arrangement period and redundant and disposed assets.

Rule 77(3) deals with the situation where there is not a continuous series of full access arrangements in place for a pipeline. It sets the opening capital base for an access arrangement period to be:

- the opening capital base determined in accordance with the NGR for a notional access arrangement taking effect at the end of the access arrangement period for the last full access arrangement ('the relevant date')
- plus the amount of capital expenditure from the relevant date
- less depreciation from the relevant date
- less disposals since the relevant date.

Capital base valuation for light regulation pipelines

Under the current provisions of the NGR, there are no requirements for a capital base valuation to be made for a light regulation pipeline that has never been a full regulation pipeline or has had an arbitration that required such a determination. A limited access arrangement does not include a capital base valuation, and information disclosure provisions do not require the service provider to publish such information. For light regulation pipelines, there is no express guidance for, or limitation on, the dispute resolution body's approach to capital base valuation. In addition:

- where a capital base has been determined for a light regulation pipeline, there is no express requirement for the dispute resolution body to use it
- where a capital base has been determined for a light regulation pipeline and the dispute resolution body uses it, there is no guidance on the appropriate methodology to roll the capital base forward.

Asset value for non-scheme pipelines

Relevant to the issues raised regarding the determination of a capital base valuation, are certain provisions included in Part 23 of the NGR. Part 23 sets out the approach for calculating an asset value for a non-scheme pipeline subject to arbitration. When making a determination under Part 23 of the NGR, the arbitrator must take into

account, among other things, the pricing principles which are set out in rule 569(3). The pricing principles require that the price reflects the cost of providing the service including a commercial rate of return. The asset valuation to which this commercial rate of return is applied set out in rule 569(4).³³⁵

Unless inconsistent with the objective of Part 23 (that is, setting prices that reflect the outcome of a workably competitive market) then the asset valuation is calculated as:

- the cost of construction of the pipeline and pipeline assets incurred before commissioning of the pipeline (including the cost of acquiring easements and other interests in land necessary for the establishment and operation of the pipeline); plus
- the amount of capital expenditure since the commissioning of the pipeline; less:
 - the return of capital recovered since the commissioning of the pipeline; and
 - the value of pipeline assets disposed of since the commissioning of the pipeline.

The GMRG intended that the ‘return of capital recovered’ in this context take into account previous returns.³³⁶ The approach adopted by the AER in its financial reporting guidelines for non-scheme pipeline service providers is consistent with this interpretation.³³⁷

The process under Part 23 of the NGR does not determine a capital base, but calculates an asset value each time there is a new arbitration requiring the calculation of tariffs. There is no requirement for an arbitrator to use a previous asset value or asset valuation methodology for any subsequent arbitration, even in relation to the same pipeline.

Calculating returns and indexation of the capital base

The NGR is less prescriptive in its approach to calculating returns and indexation of the capital base than the NER. Rule 73 of the NGR provides that financial information provided by a service provider must be provided with a recognised basis for dealing with the effects of inflation. However, there is no specific requirement in the NGR for the capital base to be indexed for inflation. Rule 87(4)(b), however, does mandate that a nominal vanilla rate of return be used.

7.2.2 Summary of draft report findings and draft recommendations

In its draft report, the Commission stated that the correct interpretation of the term depreciation as it is used in rules 77(1) and 77(3) is that it is a high-level term that refers to economic depreciation (not accounting or tax depreciation) as would be expected in economic regulatory frameworks and models. Economic depreciation encompasses a range of approaches which may include the AER’s interpretation for Part 23 financial reporting purposes. The Commission concluded that in order to clarify the situation, the

³³⁵ Rule 569(1) of the NGR.

³³⁶ GMRG, *Gas pipeline information disclosure and arbitration framework: initial National Gas Rules explanatory note*, 2 August 2017, p. 38; GMRG, *Gas pipeline information disclosure and arbitration framework, final design recommendation*, June 2017, p. 50.

³³⁷ AER, *Financial reporting guideline for non-scheme pipelines, explanatory statement*, December 2017.

term “depreciation” when used in the calculation of an initial capital base in rules 77(1) and 77(3) of the NGR be defined such that it is clear that this is a broad term that refers to economic depreciation.

The Commission also found that the current regulatory framework does not make it clear that consistent capital base valuation and roll forward methods are intended to be applied to both light and full regulation pipelines.

There are two light regulation pipelines that have not had an initial capital base determined. These are the Kalgoorlie to Kambalda Pipeline and the Carpentaria Gas Pipeline. The Commission concluded that the benefits of developing an initial capital base for these two pipelines (increased certainty and potentially a faster outcome in the event of a dispute) outweigh the costs. As a result, the Commission concluded that the NGR should be amended to require the regulator to determine an initial opening capital base for those light regulation pipelines without an initial capital base determination within six calendar months of the commencement of the amendments.

The draft report included draft recommendations to require existing expansions and permit existing extensions to covered pipelines to be treated as part of the relevant covered pipeline. This would have the effect of including such assets in an access arrangement. The Commission concluded that the appropriate methods to employ to value these assets and include them in a capital base are those set out in rule 77 of the NGR. However, some changes would be required to allow existing, rather than only new, assets to be included in a capital base. A draft recommendation was made to this effect.

The draft report included the following draft recommendations for stakeholder comment.

Draft recommendation 16: Clarify the term depreciation when used in capital base valuations

To amend the NGR to clarify that the term “depreciation” when applied in calculating an opening capital base in rule 77 refers to economic depreciation. This gives the regulator or dispute resolution body has the discretion to take previous returns into account when setting an opening capital base for a scheme pipeline.

Draft recommendation 17: Require an initial capital base valuation for light regulation pipelines

That the NGR be amended such that:

- for those light regulation pipelines without an initial capital base, the regulator must calculate an initial capital base within six calendar months of the commencement of the amendments
- a light regulation pipeline service provider must comply with a request from the regulator for information required to calculate the initial capital base within 20 business days of the request
- an initial capital base determination will be carried out in accordance with the relevant provisions in rule 77 of the NGR

- the dispute resolution body, in a dispute regarding a light regulation pipeline, will apply the relevant initial capital base determination
- the roll forward of an existing capital base valuation for subsequent dispute resolution proceedings will be carried out in accordance with rule 77 of the NGR.

Draft recommendation 18: Enable the addition of existing extensions and expansions to the opening capital base

To amend the NGR to apply the capital base methodologies to:

- calculate the initial capital base that is associated with existing extensions and expansions
- include the existing extensions and expansions in the capital base of the pipeline.

7.3.3 Stakeholder submissions to draft report

Depreciation

Only one stakeholder expressed unequivocal support for draft recommendation 16. The ERA considered the recommended change would make it clear that depreciation is economic depreciation and not accounting or tax depreciation.³³⁸

The ACCC did not support changing rule 77 to “economic depreciation” as it was concerned that the amendment would broaden the scope for service providers to make arguments about past recovery. The ACCC considered the depreciation criteria in rule 89 already state that an asset should only be depreciated once, implying that past recovery should be taken into account.³³⁹ The AER agreed with this sentiment, and also noted that changing the terminology may affect the ability to draw from past Tribunal decisions on the topic. It considered the existing rules are sufficient for the regulator to consider previous returns in setting the opening capital base.³⁴⁰

In contrast, several stakeholders suggested that an alternative depreciation methodology should be used:

- Central Petroleum considered the draft recommendation would not provide enough clarity around how previous returns will be taken into account in establishing asset values. It considered that “economic depreciation” is too vague, making it difficult for participants to anticipate the outcome to inform appropriate pipeline charges and the merits of arbitration.³⁴¹
- The MEU noted that if there is different wording and calculation of depreciation in Parts 9 and 23, there may be an incentive for service providers to seek the regulation that maximises their revenue. For example, a service provider may seek for an extension to be covered (and hence have the Part 9 wording and calculation applied), even though this may not be the best outcome for

³³⁸ ERA, submission to the draft report, p. 8.

³³⁹ ACCC, submission to the draft report, p. 15.

³⁴⁰ AER, submission to the draft report, p. 7.

³⁴¹ Central Petroleum, submission to the draft report, p. 2.

consumers.³⁴² Central Petroleum shared these concerns of forum shopping and considered the preferable test to be that applied to uncovered pipelines (that is, Part 23), as it is more "supportive of the NGO".³⁴³

- The EUAA considered that the depreciation methodology under the NGR rules 77(1) and 77(3) needs to be exactly the same as in Part 23. The methodology should exactly reflect the intention of the regime described in the ACCC inquiry and there should be no discretion available to the regulator or dispute resolution body in applying this methodology.³⁴⁴

APGA also did not agree with draft recommendation 16, but on the basis that regulators should not be able to take previous returns into account when making an initial capital base valuation. It considered "the application of past revenue to current valuation is problematic" as it has potentially negative implications for the incentive structure for equity holders.³⁴⁵

APA expressed concern with using the recovered capital methodology as a means of valuing pipelines. It considered the recovered capital methodology is not consistent with the long term interests of consumers as it creates sovereign risk and a negative impact on future investment.³⁴⁶ In its submission, APA stated:³⁴⁷

"The recovered capital methodology, as a means of setting a capital base for an existing pipeline, is one that seeks to remove from today's asset value:

- any historical efficiencies that the pipeline service provider achieved (including efficiencies that it would have been able to retain had it actually been regulated); and
- any benefits to the pipeline service provider due to the service provider charging a higher price that would have been allowed had the pipeline been regulated historically."

Initial capital base for light regulation pipelines

Draft recommendation 17 to require calculation of an initial capital base for light regulation pipelines was supported by the ERA, Central Petroleum, MEU and EUAA.³⁴⁸

- Central Petroleum considered that all pipelines should have an initial capital base calculated using the depreciated cost of construction approach discussed above, taking previous returns into account. It considered that by not doing this, any monopolistic pricing prior to the AEMC's review is endorsed. The EUAA also considered that all pipelines that do not already have an initial capital base calculated, should have one calculated.

³⁴² MEU, submission to the draft report, p. 15.

³⁴³ Central Petroleum, submission to the draft report, p. 2.

³⁴⁴ EUAA, submission to the draft report, pp. 5-6.

³⁴⁵ APGA, submission to the draft report, p. 9.

³⁴⁶ APA, submission to the draft report, pp. 12-23.

³⁴⁷ *ibid.*, p. 2.

³⁴⁸ Submissions to the draft report: ERA, p. 9; Central Petroleum, p. 2; MEU, p. 20; EUAA, p. 5.

- The MEU considered that an initial capital base should be determined for distribution pipelines (as these should all be fully regulated), and light regulation transmission pipelines.

The AER considered that calculating the initial opening capital base for light regulation pipelines represents a fundamental change to the existing regime and therefore may not be warranted in the event that light regulation were to be removed from the regulatory framework.³⁴⁹ In subsequent discussions with the AER, the AER agreed that this recommendation should be retained if the Commission does not recommend the removal of light regulation from the NGR and NGL.³⁵⁰

APA considered the calculation of the initial capital base for light regulation pipelines would be unlikely to achieve the benefits identified in the draft report. APA considered that an initial capital base value could underpin a wide range of regulated tariffs as a result of differences in the depreciation profile, services sought, and demand for services on the pipeline.³⁵¹

Existing extensions and expansions in the capital base

Draft recommendation 18 to require existing expansions, and to allow for existing extensions, to be included in the capital base of a covered pipeline was supported by the ERA. However, it noted the existing wording of rule 77 should be clarified, as it refers only to pipelines (and not expansions of pipelines). The ERA also considered that there should be consistent applications of valuation methodologies across the different pipeline expansions, and not to value some expansions under the code and others under the NGR, for administrative simplicity and reduced regulatory cost. For this reason, it suggested that rule 77(1)(b) should be applied to all pipeline expansions.³⁵²

APGA considered that draft recommendations 16-19 are dependent on how the coverage test is applied and collectively have practical implications for the arbitration recommendations. As such, these draft recommendations should be considered as a single group after the coverage issue (discussed in Chapter 3) is clarified.³⁵³

7.2.4 Commission analysis

Depreciation

The draft recommendation on depreciation was to clarify the term depreciation when used in capital base valuations. The draft recommendation proposed to amend the NGR to clarify that the term “depreciation” refers to economic depreciation. This was to be achieved by amending the definition of ‘depreciation’ at the start of Part 9 of the NGR.

This draft recommendation did not (and was not intended to) change the discretion held by the regulator or dispute resolution body when setting an opening capital base for a scheme pipeline. This includes the current discretion on whether and how to

³⁴⁹ AER, submission to the draft report, p. 7.

³⁵⁰ The AEMC held regular discussions with the AER and ERA over the course of the preparation of this report.

³⁵¹ APA, submission to the draft report, p. 12.

³⁵² ERA, submission to the draft report, p. 9.

³⁵³ APGA, submission to the draft report, p. 9

consider past returns earned from a pipeline when calculating its initial opening capital base. The draft recommendation was made to address stakeholder concerns that reference tariffs on full regulation pipelines or arbitrated tariffs on light regulation pipelines may be too high due to asset valuation techniques that do not fully account for the capital that the service provider has recovered. It was also intended to address general uncertainty in relation to whether the usage of the term “return of capital” in rule 569 of Part 23 of the NGR in contrast to the term “depreciation” in rule 77 of Part 9 of the NGR, was intended to differentiate the asset valuation methodologies allowed under each. The Commission’s view in the draft report was that the correct interpretation of “depreciation” in rule 77 is “economic depreciation”, which covers a range of approaches including, potentially, the recovered capital methodology, having regard to the revenue and pricing principles and the NGO.

“Economic depreciation” is the period-by-period change in the market value of the pipeline. This market value reflects the future income stream that the pipeline is expected to generate over the remainder of its economic life. The total value of economic depreciation accumulates from the time a pipeline is constructed and commissioned as for each year the potential income stream declines. However, while it always exists, accumulated economic depreciation is only valued when:

- a pipeline becomes subject to economic regulation (including regulatory reporting regimes)
- a regulator or dispute resolution body is required to determine an initial opening capital base or asset value for a pipeline.

Rule 77 of Part 9 of the NGR is concerned with how to determine the opening capital base of a full regulation pipeline:

- when a pipeline service provider submits the first access arrangement after a pipeline becomes covered (rule 77(1))
- when an opening capital base is required for a new access arrangement period that immediately follows a previous access arrangement period (rule 77(2))
- when an opening capital base is required for a new access arrangement period that does not immediately follow a previous period (rule 77(3)).

Depreciation is one element in determining the initial opening capital base. In the current context of rule 77(1), there is no single, universally applicable methodology for calculating depreciation. Accordingly, in this context, many depreciation profiles could be assumed for the period between commissioning and the date of setting the initial opening capital base.

In contrast, rules 77(2) and 77(3) of the NGR relate to the depreciation schedule for a full regulation pipeline that has had an initial capital base valuation. Rule 89 sets out criteria for the regulator to assess depreciation during an access arrangement period. These criteria are linked to the determination of reference tariffs. As a result, rule 89 of the NGR is relevant to determine an opening capital base at the beginning of a subsequent access arrangement period, but does not apply to the opening capital base for the initial access arrangement period. Rule 89 is concerned with the change in the value of the pipeline across access arrangement periods.

Therefore, the NGR do not provide guidance on determining depreciation to calculate an initial opening capital base for a pipeline under rule 77(1). The Commission does not agree with the ACCC's submission to the draft report that the criteria in rule 89 also apply to initial opening capital base decisions under rule 77(1).³⁵⁴

Within the framework for economic regulation of full regulation and light regulation pipelines, the methodology that is chosen to calculate depreciation should promote the NGO and the revenue and pricing principles.³⁵⁵ One depreciation methodology used under rule 77 could be depreciation calculated over the economic life of the pipeline with a roll forward of the capital base value. . However, the NGR does not limit the regulator to only the roll forward methodology. The Commission considers that other methodologies could also be adopted by the regulator or dispute resolution body to determine the initial opening capital base under rule 77(1) of the NGR subject to the revenue and pricing principles and the NGO. One of these may be a recovered capital methodology such as that included in the AER guideline on financial reporting obligations under Part 23 of the NGR.

The relative simplicity of the capital base roll forward model is that it does not require an ex post determination of an efficient rate of return for each year between pipeline commissioning and initial opening capital base determination. In contrast, the relative complexity of the recovered capital methodology is that it requires an ex post determination of the appropriate commercial rate on return over each year of the period between commissioning and initial opening capital base determination to calculate depreciation. The rate of return would have to take account of the relevant, project-based risks expected at the time of the investment decision. It should avoid taking into account subsequent information about the actual success of the project, because this has a negative impact on incentives for the service provider to be efficient. The Commission considers that this is a difficult task in practice. Table 7.1 lists some of the potential outcomes under each methodology.

³⁵⁴ ACCC, submission to the draft report, p. 15.

³⁵⁵ Sections 23 and 24 of the NGL.

Table 7.1 Potential outcomes under regulatory roll forward and recovered capital methodologies

Regulatory roll forward	Recovered capital
Assurance that the pipeline investor could recover its efficient costs including a return on the original capital invested	Reduced level of assurance that the pipeline investor could recover its efficient costs given that the level of returns is variable based on the accuracy of each component of the methodology, and particularly the estimated rate of return applied to the past investments
Limited distortion to investment or operational decisions, as methodology does not directly take into account historical revenues	Distortion to investment or operational decisions, as the methodology does take account of historical revenues
No accounting for the potential for under investment	Increased likelihood that the total charges paid by users over the full life of the pipeline reflect the efficient costs of constructing and operating the pipeline, depending on the accuracy of the calculations
Under Part 9 of the NGR, consistency between calculation of past accumulated depreciation from the time of construction to the time of initial opening capital base determination and the calculation of depreciation across access arrangement periods	Under Part 9 of the NGR, lack of consistency between calculation of past accumulated depreciation from the time of construction to the time of initial opening capital base determination and the calculation of depreciation across access arrangement periods
Increased likelihood of a higher asset value than under recovered capital method and therefore higher tariffs for a pipeline with positive investment return, and of a lower asset value for a pipeline with negative investment return	Increased likelihood of a lower asset value than under regulatory roll forward and therefore lower tariffs for a pipeline with positive investment return, and of a higher asset value for a pipeline with negative investment return

Given the expected outcomes under different methodologies, the Commission considers that the regulator should retain its discretion in determining the appropriate methodology for the purposes of rule 77(1). The Commission expects that in exercising this discretion, the regulator would have regard to the NGO and revenue and pricing principles in addition to a range of factors such as the following:

- the service provider should have a reasonable opportunity to recover the efficient costs of providing the pipeline services, including a rate of return on its investment in the pipeline that reflects the risks of providing those pipeline services
- the service provider should have an incentive to maximise the utilisation of the capacity of the pipeline and meet the needs of users and potential users over the remaining economic life of the pipeline
- the approach should provide incentives for future efficient investment in pipeline services and in markets upstream and downstream of the pipeline.

While the Commission considers that the factors listed above are relevant to the selection of depreciation for an initial capital base valuation, it acknowledges that any amendment to the NGR to include such factors may be premature at this time. Potential amendments to the NGR in this regard would benefit from further stakeholder consultation. An opportunity for this could arise in a rule change process following this review.

On balance, the Commission recommends not making any changes to the depreciation provision in the NGR in relation to the determination of an initial opening capital base at this time. The Commission considers that this final recommendation addresses submissions to the draft report in that it:

- avoids the risk that changes to the NGR could unintentionally constrain the regulator or dispute resolution body and increase uncertainty around the interpretation of depreciation in the determination of an initial opening capital base under Part 9 of the NGR
- maintains the discretion of the regulator and dispute resolution body to apply an asset valuation methodology that achieves the NGO and is consistent with the revenue and pricing principles on a case by case basis
- recognises that there is no single appropriate approach that should be adopted by regulators and the dispute resolution body in all circumstances, so it would not be appropriate to seek to remove all uncertainty by being highly prescriptive in the NGR.

Initial capital base for light regulation pipelines, extensions and expansions

Even though most scheme pipelines have an initial capital base determination, the above analysis is relevant for the following:

- the final recommendation on expansions contained in Chapter 4 means that there are expansions that need to have an initial capital base calculated
- the final recommendation on extensions contained in Chapter 4 means that there may also be extensions that need to have an initial capital base calculated
- non-scheme pipelines may become scheme pipelines and require an initial capital base determination
- not all current light regulation pipelines have had an initial capital base determination.

The dispute resolution body is currently not explicitly required to follow the capital base valuation methodologies contained in rule 77 of the NGR nor have regard to an existing capital base determination in disputes regarding a light regulation pipeline. The Commission considers that the framework intends that consistent capital base valuation and roll forward methods apply to light and full regulation pipelines. However, the current framework does not provide sufficient guidance to the dispute resolution body in this regard.

There are currently two light regulation pipelines that have not had an initial capital base determined. These are the Kalgoorlie to Kambalda Pipeline in Western Australia that is regulated by the ERA, and the Carpentaria Gas Pipeline in Queensland that is regulated by the AER. As indicated in the draft report, the Commission considers that there are a number of benefits in having an initial capital base determination for light regulation pipelines. These benefits have not been disputed in submissions. The Commission considers that these benefits are consistent with achieving the NGO. These include:

- increased certainty for service providers, users and prospective users as to dispute resolution outcomes in relation to tariffs
- the increased certainty improves the likelihood of a negotiated settlement
- if a dispute resolution in relation to tariffs was to eventuate, it would be simpler and quicker given the initial capital base, a key component in the determination of a tariff, has already been determined.

There are costs associated with developing an initial capital base for both the regulator and service provider. However, the Commission considers that the benefits outlined above outweigh such costs. In addition, these costs would be incurred, in any event, should there be a dispute resolution proceeding.

Therefore, the Commission recommends amendments to the NGL and NGR that will require:

- for those light regulation pipelines without an initial capital base determination, the regulator to determine an initial capital base within six calendar months of the commencement of the amendments
- the service provider to comply with a request from the regulator for information required to calculate the initial capital base within 20 business days of the request
- the initial capital base calculations to be carried out in accordance with provisions similar to the relevant provisions in rule 77 of the NGR
- the dispute resolution body, in a dispute regarding a light regulation pipeline, to apply the relevant initial capital base determination
- the roll forward of existing capital base valuations for subsequent dispute resolution proceedings will be carried out with provisions similar to the relevant provisions in rule 77 of the NGR.

Therefore, the Commission's final recommendation is that amendments be made to Part 7 of the NGR so that the capital base methodologies are used to calculate the initial capital base that is associated with light regulation pipelines and existing extensions and expansions, and to roll them forward.

As a result of recommendations contained in Chapter 4, it is likely that some existing assets associated with extensions and expansions will be rolled into capital bases for full regulation pipelines at their next access arrangement review. Service providers may also elect to include existing extension assets in an access arrangement.

The appropriate approach for these valuations is to apply the methods contained in rules 77(1) and 77(3) of the NGR. Rules 77(1) and 77(3) apply when either a pipeline first becomes covered or after a period intervenes between access arrangement periods.

The application of the provisions of rule 77(1) would treat the pipeline assets as if they were a separate pipeline for the calculation of the initial capital base. The outcome would be an initial capital base determination for the pipeline assets. This would then be added to the opening capital base for the next access arrangement period for the relevant pipeline under an amended rule 77(3). This would be a one-off change to the opening capital base calculation for the relevant pipelines that would need to be achieved by amendments to rule 77 of the NGR.

7.2.5 Final recommendations

Recommendation 17: Require an initial capital base valuation for light regulation pipelines

Amend the NGR such that:

- for those light regulation pipelines without an initial capital base, the regulator must calculate an initial capital base within six calendar months of the commencement of the amendments
- a light regulation pipeline service provider must comply with a request from the regulator for information required to calculate the initial capital base within twenty business days of the request
- an initial capital base determination will be carried out in accordance with provisions similar to the relevant provisions in rule 77 of the NGR
- the dispute resolution body, in a dispute regarding a light regulation pipeline, will apply the relevant initial capital base determination
- the roll forward of existing capital base valuation for subsequent dispute resolution proceedings will be carried out in accordance with provisions similar to the relevant provisions in rule 77 of the NGR.

This recommendation will be effected through an amendment to Part 7 of the NGR with the proposed addition of a new rule 35A.

Recommendation 18: Enable addition of existing extensions and expansions to the opening capital base

Apply the initial opening capital base determination methodology in rule 77(1) to:

- calculate the initial capital base that is associated with existing extensions and expansions
- roll the existing extensions and expansions forward in the capital base for the pipeline.

This recommendation will be effected through proposed transitional rules.

7.3 Depreciation schedule

7.3.1 Current framework

A depreciation schedule lists assets by asset class, assigns an asset life to each asset class, and outlines how each asset class will be depreciated. Rule 89 of the NGR sets out that a depreciation schedule should be designed such that:

- reference tariffs vary over time, in a way that promotes efficient growth in the market for reference services
- each asset or group of assets is depreciated over the economic life of that asset or group of assets
- an asset is depreciated only once

- the service provider's reasonable needs for cash flow meet financing, non-capital and other costs.

This rule is currently applied by the regulator with limited discretion.³⁵⁶

7.3.2 Summary of draft report findings and draft recommendations

Rule 89 requires that the depreciation schedule be designed, among other things, to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs. DBP and AGN argued that rule 89 should be clarified to require the depreciation schedule to be set to deliver sufficient cash flow to maintain the credit rating of the benchmark service provider that is assumed in setting the cost of debt. DBP and AGN referred to this as financeability.³⁵⁷

In its draft report, the Commission found that the current provisions are flexible enough to allow for adjustments in the depreciation schedule to reflect market changes. It also considered that financing requirements were included in the criteria in rule 89 of the NGR. The Commission also noted that stakeholders generally considered the criteria in rule 89 were appropriate. On this basis, the Commission concluded that no change was required to the depreciation criteria in rule 89 of the NGR.

The Commission recommended removing the limited regulatory discretion framework created by rule 40 of the NGR in its draft report (see Chapter 6 of this report). As a result, limited discretion would no longer apply to the depreciation criteria in rule 89.

7.3.3 Stakeholder submissions to draft report

In its submission to the draft report, AGIG (formerly DBP and AGN) put forward a proposal regarding financeability. This expanded on the DBP and AGN submission to the issues paper. AGIG suggested that a financeability objective be inserted into the NGR, with a corresponding amendment to the depreciation criteria in rule 89(1).³⁵⁸ AGIG provided drafting of such a rule as part of its submission.³⁵⁹ AGIG contended that its financeability objective would:³⁶⁰

“...require a regulator to test when making a regulatory determination whether a benchmark efficient entity for whom the decision is being made would pass a test of financeability in respect of the relevant credit metrics the decision would engender. If the test of financeability is not passed, then the regulatory determination should be altered to address the financeability issue.”

Specifically, the regulator would consider amending the cashflow profile of the regulated service provider by altering the depreciation schedule either by:

³⁵⁶ See Chapter 6 for recommendations on regulatory discretion.

³⁵⁷ DBP and AGN, submission to the issues paper, p. 16.

³⁵⁸ AGIG, submission to the draft report, Attachments A & B.

³⁵⁹ AGIG subsequently confirmed that the rule drafting contained in the submission was not intended to be considered as a rule change request.

³⁶⁰ AGIG, submission to the draft report, Attachment A, p. 1.

- making an adjustment to the approach to depreciation, by allowing more of the unrecovered investment is returned earlier and less is recovered later
- implementing a total expenditure (totex) approach and treating a portion of capital expenditure as operating expenditure, (setting the asset life for an investment to zero years and providing an immediate return on the portion of capital expenditure).³⁶¹

According to AGIG, the insertion of a financeability objective would require the regulator to test the financeability of a benchmark efficient entity, rather than the service provider itself. In doing so the test would "provide for a regulatory decision that is internally consistent and provides for the business to deliver on the scope of works set out in the regulatory decision."³⁶²

ATCO also noted financeability assessments can be a means of cross checking regulatory decisions.³⁶³

7.3.4 Commission analysis

In response to the Commission's issues paper, stakeholders considered that the depreciation criteria set out in rule 89 are appropriate. However, Hydro Tasmania highlighted that in the changing and dynamic nature of current gas markets, the current regime may not allow reference tariffs to increase as demand declines. Hydro Tasmania noted that adjusting the depreciation schedule is a potential way to allow tariffs to respond to market changes.³⁶⁴ This has been recognised by the AER.³⁶⁵

“Further, we recognise the development of disruptive technologies in the Australian energy sector may create some non-systematic risk to the cash flows of energy network businesses. We consider these can be more appropriately compensated through regulated cashflows (such as accelerated depreciation of assets).”

This suggests that views on economic depreciation are aligned. The current provisions of the NGR on depreciation are flexible enough to allow for adjustments to depreciation schedules to be made to reflect market changes as previously recognised by the AER. No changes to the NGR are necessary to enable this approach.

Also in response to the issues paper, DBP and AGN had argued that rule 89 should be clarified to require the depreciation schedule to be set to deliver sufficient cash flow to maintain the credit rating of the benchmark service provider that is assumed in setting the cost of debt. DBP and AGN referred to this as financeability.³⁶⁶ In the submission to the draft report, AGIG expanded on this and suggested that a financeability objective be inserted into the NGR.

³⁶¹ AGIG, submission to the draft report, p. 7.

³⁶² *ibid.*, p. 4.

³⁶³ ATCO, submission to the draft report, p.7.

³⁶⁴ Hydro Tasmania, submission to the issues paper, pp. 2-3.

³⁶⁵ AER, SA Power Networks preliminary decision – Attachment 3: Rate of return, April 2015, p. 376.

³⁶⁶ DBP and AGN, submission to the issues paper, p. 16.

The current criteria in rule 89 already include consideration of financing costs, although without the specific requirement that the assumed credit rating of the benchmark service provider is to be maintained. Nevertheless, the Commission considers that the current wording in rule 89 is consistent with the views expressed by DBP and AGN (and subsequently by AGIG and ATCO). The current rule states that the depreciation schedule should be designed, among other things, to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs.

The issues raised by AGIG and ATCO in relation to financeability are also related to other aspects of the a regulatory framework, notably the method of assessing expenditure and a potential change to adopt a total expenditure framework. The adoption of a total expenditure framework and associated financeability test is not within the scope of this review, but the Commission is currently considering these issues as part of its Electricity networks economic regulatory framework review.

Although the issues currently being considered in that review relate to electricity networks, if the Commission decides to proceed with consideration of changes to the method of assessing expenditure and a potential move to a total expenditure framework as part of the 2019 review, the Commission will also consider as part of that review whether similar changes should be made to the NGR. Accordingly, the Commission does not propose to change its position from the draft report and is recommending no change to the depreciation schedule rule at this time.

As set out in Chapter 6 of this final report, the Commission recommends removing the limited regulatory discretion framework created by rule 40 of the NGR. As a result, limited discretion will no longer apply to the depreciation criteria in rule 89.

7.4 Cost allocation

7.4.1 Current framework

Rule 93 of the NGR includes provisions that require the allocation of total revenue across reference services and other services to reflect the allocation of costs directly attributable to reference services and other costs across reference services and other pipeline services that are not reference services:

- cost directly attributable to providing reference services are allocated to those reference services, and the costs directly attributable to providing non-reference services are allocated to those non-reference services
- other costs are allocated between reference services and non-reference services on a basis that is determined or approved by the regulator, in line with the revenue and pricing principles.

7.4.2 Summary of draft report findings and draft recommendations

In the draft report, the Commission observed that if operating and capital expenditure are not allocated efficiently between the covered and uncovered parts of a pipeline, there is potential that the reference tariff will not reflect the efficient costs of providing the reference service. On this basis, it noted that the relevant provisions of the NGR were not sufficiently clear to enable efficient and appropriate cost allocation to occur.

The Commission's draft recommendation was that the NGR should be amended so that the service provider's access arrangement proposal must provide the basis and methodology used to calculate the proposed forecast expenditure (operating and capital) and the allocation of that expenditure between the covered and uncovered parts of a covered pipeline. The NGR should also specify that an access arrangement proposal must also provide a break-down of the proposed forecast capital and operating costs after expenditure has been allocated between the covered and uncovered parts of the pipeline.

Draft recommendation 19: Require allocation of expenditure between covered and uncovered parts of a pipeline

To amend the NGR in order to:

- require an access arrangement revision proposal to include proposed forecast capital and operating expenditures that refer to costs after an allocation of expenditure between the covered and uncovered parts of a covered pipeline
- require a service provider to provide to the regulator details of the basis and methodology used to calculate the proposed forecast capital expenditure and operating expenditure and the allocation of the expenditure
- clarify the regulator's discretion in assessing the total expenditure and cost allocation.

7.4.3 Stakeholder submissions to draft report

The ACCC supported draft recommendation 19 to require cost allocation between covered and uncovered parts of the pipeline, and for the service provider to provide the

methodology used to the regulator.³⁶⁷ The ERA also supported the draft recommendation as it would allow for more transparency of the allocation of expenditure. It noted it had issues with cost allocation in the access arrangement for the Goldfields Gas Pipeline:³⁶⁸

“As expansions will now be considered to be part of the covered pipeline, some of the more difficult shared cost allocations will be avoided. For example, in the last Goldfields Gas Pipeline access arrangement review, despite the physical pipeline being used to service both covered and uncovered services, the cost of that asset was only attributed to the covered pipeline due to the NGR. There will be still be a shared cost issues with the possibility of extensions to a pipeline being treated as uncovered and so the AEMC's changes are still necessary. It is more likely these will relate to operating expenditure.”

APA considered that it was unclear why draft recommendation 19 was necessary. It noted that regulators already require service providers to provide both allocations and methods of allocation during the access arrangement process.³⁶⁹

7.4.4 Commission analysis

In order to calculate efficient costs, all costs will need to be allocated between covered and uncovered parts of a pipeline. If this does not occur, then a reference tariff will potentially not reflect the efficient costs of providing the reference service and could include costs associated with providing services utilising uncovered parts of the pipeline. As a result, users may pay more than the efficient cost of providing the service that they use.

While rule 93 of the NGR provides for the allocation of ‘total revenue’ across reference services and other services, it does not specify that there is an allocation of costs between covered and uncovered parts of a pipeline. This is because ‘total revenue’ calculated by the building block approach under rule 76 of the NGR applies only to the covered assets.

The recommendations contained in Chapter 4 in relation to the coverage of expansions are expected to reduce the importance of the issue in relation to allocation between covered and uncovered parts of a pipeline generated from the existence of uncovered expansions. However, there may still be uncovered extensions of covered pipelines that require cost allocation to be applied across covered and uncovered assets. This raises practical difficulties for service providers and regulators in determining and assessing costs, as noted by the ERA.

While APA considered the draft recommendation unnecessary, given the implications on reference tariffs for pipeline users the Commission does not propose to change its position from the draft report. The Commission remains of the view that both rules 79 and 91 should be amended to clarify that proposed forecast capital and operating

³⁶⁷ ACCC, submission to the draft report, p. 7.

³⁶⁸ ERA, submission to the draft report, p. 9.

³⁶⁹ APA, submission to the draft report, p. 29.

expenditures refer to costs after an allocation of costs between the covered and uncovered parts of a pipeline has occurred.

To support this change, the NGR should also be amended so that the service provider details the basis for the total costs and the cost allocation method that it has used, so that the regulator can assess its reasonableness and make an informed decision on the proposal.

7.4.5 Final recommendation

Recommendation 19: Require allocation of expenditure between covered and uncovered parts of a pipeline

Amend the NGR in order to:

- require an access arrangement revision proposal to include proposed forecast capital and operating expenditures that refer to costs after an allocation of expenditure between the covered and uncovered parts of a covered pipeline
- require a service provider to provide to the regulator details of the basis and methodology used to calculate the proposed forecast capital expenditure and operating expenditure and the allocation of the expenditure
- clarify the regulator's discretion in assessing the total expenditure and cost allocation.

The Commission's recommendation is reflected in the draft amendments to rules 79 and 91 of the NGR.

7.5 Rebateable services

7.5.1 Current framework

Rule 93 permits the regulator to allocate costs of rebateable services to reference services as long as the regulator is satisfied that the service provider will later apply an appropriate portion of the revenue generated from the sale of rebateable services to provide price rebates (or refunds) to the users of reference services. Rule 93(4) defines rebateable services as non-reference services for which:

- the markets are substantially different from markets for reference services
- demand, or the revenue to be generated from the service, is substantially uncertain.

7.5.2 Summary of draft report findings and draft recommendations

Rule 93 allows for the allocation of costs associated with rebateable services to reference services and provides for an ex-post refund of these costs to users of the reference service. The intent of the rule is to restrict the ability of service providers to monopoly price so that new services using covered assets are not cross subsidised by the reference tariffs. However, there is ambiguity and insufficient guidance in rule 93 on how to practically apply the refund. The Commission recommended that the NGR should be amended to allow for the rebate of revenues from the rebateable services in the reference tariff variation mechanism and achieve the policy intent of the provision.

The AER had expressed concern that the current rule requirement for a rebateable service to be in a substantially different market from a reference service creates a difficulty in identifying rebateable services. As such, the Commission concluded that the separate market requirement for rebateable services should be removed from rule 93 of the NGR. This recommendation is consistent with the Commission's draft recommendation to remove the market definition concept from the reference service test in the NGR .

Draft recommendation 20: Amend definition of rebateable services and rebate methodology

To amend the NGR to:

- add a requirement that if an access arrangement includes rebateable services then it must also allow for the rebate of revenues from the rebateable services in the reference tariff variation mechanism
- remove the requirement that rebateable services must be in a different market to reference services.

7.5.3 Stakeholder submissions to draft report

The ACCC and ERA supported the draft recommendation to remove the requirement that rebateable services must be in a different market to the reference services, and amend the way the rebate occurs.³⁷⁰ The ACCC considered the current drafting of rebateable service provisions could constrain the specification of these services and prevent revenue being shared with users.³⁷¹ It noted:

“In principle, the costs to be recovered from the users of reference service should exclude the costs of providing non-reference services. However, rule 93 allows the regulator to allocate the costs of providing a 'rebateable service' to the reference service if it is satisfied the service provider will later rebate a portion of the revenue from the sale of that service to the users of reference services. ... as currently drafted this requirement could unnecessarily constrain the specification of rebateable services and prevent any revenue derived from the provision of these services from being shared with users that are, in effect, funding the provision of these services.”

In contrast, APA considered that it was unclear why draft recommendation 20 was necessary. It did not consider there were any issues in defining the rebateable services during the recent access arrangement proposal process for the Roma to Brisbane Pipeline.³⁷²

7.5.4 Commission analysis

In 2011, the AER sought a rule change to remove the requirement for a rebateable service to be in a substantially different market from a reference service as it was concerned that this requirement restricted the practical use of rebateable services in the

³⁷⁰ ERA, submission to the draft report, p. 10.

³⁷¹ ACCC, submission to the draft report, pp. 6-7.

³⁷² APA, submission to the draft report, p. 29.

DTS access arrangement. At the time, the AEMC did not consider that the potential benefits of making such a change to the rebateable services definition outweighed the costs.³⁷³

Nevertheless, as raised by the ACCC and ERA, the requirement for rebateable service to be in a different market to the market for reference services remains a concern for regulators. It is a difficult aspect for regulators because it is complex to define a market and ascertain that it is different from another market (in this case, the market for the reference services). APA's belief that such analysis is not problematic does not address the concerns raised. The Commission shares the ACCC and ERA's concerns and considers that the workability of the rule should be improved. In considering this, it has concluded that the key determinant as to whether a service should be a rebateable service is whether it is possible to forecast the demand of the service upfront. As noted by the ERA, the current requirement of being in different markets should not be a key aspect of determining whether a service should be a rebateable service.

Accordingly, it is recommended that the separate market requirement for rebateable services be removed from rule 93 of the NGR. The removal of the requirement to define a market for a service in this rule is consistent with the Commission's recommendation to remove the market definition concept from the reference service test in the NGR as discussed in Chapter 5.

Rule 93 also allows for the allocation of costs associated with rebateable services to reference services. The rule provides for an ex-post re-allocation of these costs through a refund to users of reference services. However, the rule does not provide any guidance on how this could be practically implemented, particularly as it specifies price rebates or refunds be provided to the 'users of reference services' rather than simply that the rebate is to be applied to reference tariffs, for example. This is a problem because in practice there may be few, if any, users of the reference service, as the reference service operates as a benchmark under the framework and users may have negotiated to receive a slightly different service. Moreover, the term "users of the reference service" is not defined.

It is also an issue as the intent of the current rebateable service provisions is to restrict the ability of service providers to monopoly price so that new services using covered assets are not cross subsidised by the reference tariffs. However, the ambiguity and insufficient guidance in the rule impacts on achieving this policy intent.

The rebate is similar in some ways to other adjustments to reference tariffs that take place through the operation of the tariff variation mechanism under rule 97 of the NGR. As the tariff variation mechanism is a process that is understood and applied by service providers and regulators, it is recommended that rebates from rebateable services occur

³⁷³ The analysis undertaken by the AEMC looked at the Victorian DTS and contract carriage pipelines. The analysis focused on the service at issue in the AER's request, which was the DTS AMDQ cc (authorised maximum daily quantity credit certificates). The AEMC identified that the effect of the approved DTS access arrangement (specifically the annual tariff variation mechanism) was to rebate part of the benefits accruing to APA from the AMDQ cc to users of the reference services in the following year. The analysis of contract carriage pipelines focussed on intra-day-nominations in contract carriage pipelines and the potential impact on most favoured nation clauses in existing contracts. AEMC, *Reference service and rebateable service definition, rule determination*, 1 November 2012, pp. iii, 30 and 56.

through this existing mechanism. This approach would be achievable in practice and consistent with the overall objective of allocating costs appropriately between services. The application of a rebate to a reference service will decrease the reference tariff. Accordingly, the reference tariff will more appropriately reflect the efficient cost of providing the reference service.

This solution is similar to the outcome achieved in the recent Roma to Brisbane Pipeline final decision where the AER has accepted an adjustment for rebateable services through a tariff amendment rather than direct rebates to users.³⁷⁴

Accordingly, the Commission recommends that rule 93 of the NGR be amended to allow for the reduction in reference tariffs to occur where there has been revenue generated from the sale of rebateable services. This should also be acknowledged in rule 97 (mechanics of reference tariff variation).

Together, the recommended amendments regarding rebateable services aim to enable the regulators to determine cost reflective tariffs for users. As a result, users should pay for the services they use rather than other services that they do not use. This supports the efficient use of pipeline services.

7.5.5 Final recommendation

Recommendation 20: Amend the definition of rebateable services and rebate methodology

Amend the NGR to:

- enable the reduction of reference tariffs in accordance with rebateable service revenue through the reference tariff variation mechanism
- remove the requirement that rebateable services must be in a different market to reference services.

The Commission's recommendation is reflected in the draft amendments to rules 93 and 97 of the NGR.

³⁷⁴ AER, *Final decision, Roma to Brisbane Gas Pipeline access arrangement 2017-2022*, Overview, November 2017.

8 Negotiation and information

Box 8.1 Summary of findings and recommendations

Up to date capacity and usage information is required by prospective users in order to decide whether to seek access and in negotiations for access. Bulletin Board pipeline service providers are required to publicly disclose up to date capacity and usage information. However, the up to date disclosure obligations on other full and light regulation pipeline service providers are limited, meaning that prospective users may be insufficiently informed in their access negotiations.

To address the consequences of this, the Commission's final recommendations for full regulation and light regulation pipelines are to:

- require transmission pipeline service providers to disclose augmented Bulletin Board information
- require distribution pipeline service providers to disclose capacity and usage information.

Light regulation pipeline service providers are required to publish very little financial and offer information, making it difficult for prospective users to form a view on the reasonableness or otherwise of offers put before them. To address this issue, the Commission has made a recommendation to introduce a financial and offer information disclosure regime for light regulation pipelines.

Other recommendations include:

- rename the Scheme Register and update its required contents to include additional non-scheme pipeline information
- clarify the role of the regulator in passing on information requests to service providers
- remove the requirement to provide KPIs as part of the access arrangement information.

The NGL and NGR provide a negotiate-arbitrate regime for third party access to natural gas pipelines. Effective access negotiations are underpinned by information on the availability and cost of the services to which the user is seeking access.

This chapter discusses information provision requirements in the NGL and NGR for access negotiations on full regulation and light regulation pipelines. For prospective users, removing existing information asymmetries should facilitate effective access negotiations. Where a negotiated outcome is not achieved, the availability of an appropriate level of information will assist prospective users to decide whether to initiate the arbitration process³⁷⁵ and more effectively put forward their case. Chapter 9

³⁷⁵ In this report the term "arbitration" generally means the process in Chapter 6, Part 3 of the NGL where the "dispute resolution body" makes a "determination on access".

discusses arbitration, and covers information provision requirements during the arbitration process.

In the gas pipeline negotiate-arbitrate regime for full and light regulation pipelines, information is required for the following purposes:

- by the regulator, in order to:
 - approve or amend access arrangements
 - monitor and report on compliance
 - monitor and report on financial and operational performance
 - benchmark service providers
- by users and prospective users, to:
 - determine whether spare capacity exists or will exist (for example, through an expansion)
 - understand how tariffs are determined.

This chapter discusses:

- information available to the regulator (section 8.1)
- pipeline capacity and usage information(section 8.2)
- pipeline financial and offer information(section 8.3)
- key performance indicators (section 8.4)
- the Scheme Register (section 8.5).

8.1 Information available to the regulator

8.1.1 Current framework

Functions and powers of the regulator

Section 27 of the NGL states that the regulator has the following functions and powers:

- (a) to monitor compliance with the NGL, the National Gas Regulations and the NGR, including compliance with an applicable access arrangement,³⁷⁶ an access determination and a ring fencing decision
- (b) to investigate breaches or possible breaches of provisions of the NGL, the National Gas Regulations and the NGR
- (c) to institute and conduct proceedings in relation to breaches of provisions of the NGL, the National Gas Regulations and the NGR
- (d) to institute and conduct appeals from decisions in proceedings referred to in paragraph (c)
- (e) AER economic regulatory functions or powers

³⁷⁶ Section 2 of the NGL defines an access arrangement as an arrangement setting out terms and conditions about access to pipeline services provided or to be provided by means of a pipeline.

- (f) to prepare and publish reports on the financial and operational performance of service providers in providing pipeline services by means of covered pipelines³⁷⁷
- (g) to approve compliance programs of service providers relating to compliance by service providers with the NGL or the NGR
- (h) any other functions and powers conferred on it under the NGL or NGR.³⁷⁸

Access arrangement information

For full regulation pipelines, the regulator receives access arrangement proposals for approval. The pipeline information initially provided by pipeline service providers through the access arrangement proposals and the accompanying access arrangement information is relatively comprehensive. The information includes a description of the pipeline, reference services and tariffs, terms and conditions, capacity trading requirements, and extension and expansion requirements.³⁷⁹

Access arrangement information submitted with the access arrangement proposal is defined as information that is reasonably necessary for users and prospective users:

- to understand the background to the access arrangement or the access arrangement proposal
- to understand the basis and derivation of the various elements of the access arrangement or the access arrangement proposal.³⁸⁰

In addition, the access arrangement information must contain a comprehensive suite of information on the building block components underpinning proposed reference service tariffs and revenues.³⁸¹

The regulator may require further submissions or revisions to the submitted access arrangement information if, in the regulator's opinion, the access arrangement information is deficient in its comprehensiveness or in any other respect.³⁸²

A service provider may choose to submit a limited access arrangement proposal for a light regulation pipeline. A limited access arrangement contains less information than a full access arrangement and in particular is not required to contain pricing information.³⁸³ As a result, the building block information and approach under Part 9 of the NGR does not apply to a limited access arrangement.³⁸⁴ To date no limited access arrangement proposals have been submitted.

³⁷⁷ Covered pipelines include full regulation and light regulation pipelines.

³⁷⁸ The regulator also has a number of other functions and powers relating to markets and enforcement that are outside of the scope of this review.

³⁷⁹ Rule 48 of the NGR.

³⁸⁰ Rule 42(1) of the NGR.

³⁸¹ Part 9, Divisions 2 and 3 of the NGR.

³⁸² Rule 43(3) of the NGR.

³⁸³ Rule 45 of the NGR.

³⁸⁴ Rule 70 of the NGR.

Regulatory information notices and orders

For full regulation and light regulation pipelines the regulator can serve regulatory information notices (RINs) and make regulatory information orders (RIOs). RINs are information notices issued to specific pipeline service providers.³⁸⁵ RIOs are general information orders applying to a specified class of pipeline service providers.³⁸⁶ A regulator can serve RINs or make RIOs if it considers the information is reasonably necessary for the performance or exercise of its functions or powers.³⁸⁷ RINs and RIOs allow the regulator to obtain the information that it reasonably requires in order to assess and potentially approve an access arrangement proposal. RINs and RIOs can also be used by the regulator to assist in undertaking its other functions in relation to both full and light regulation pipelines. RINs and RIOs can only be issued to full regulation and light regulation pipeline service providers or their related providers.³⁸⁸

Regulators' general information gathering powers

Regulators also have a general information gathering power to serve a notice that requires a person who is capable of doing so to provide information or produce a document that the regulator requires for the performance or exercise of a function conferred on it under the NGL or the NGR.³⁸⁹

The threshold test for using this general information gathering power is more onerous than that for RINs and RIOs. The regulator must “require” the information rather than “consider it reasonably necessary” for the exercise of its functions or powers.

However, this general power is not limited in application to full and light regulation pipelines. It applies to any person capable of providing information. This power may be useful in obtaining information on non-scheme components of a pipeline such as cost allocations to uncovered extensions, or for compliance matters regarding non-scheme pipelines.

Dispute resolution

As a dispute resolution body, the Energy Disputes Arbitrator in Western Australia and the AER in all other states, may summon a person to appear before it and to produce such documents as are referred to in the summons.³⁹⁰ Dispute resolution is covered in Chapter 9 of this report.

385 Section 46 of the NGL.

386 Section 45 of the NGL.

387 Section 48 of the NGL.

388 Sections 27, 43, 45 and 46 of the NGL.

389 Section 42(1) of the NGL.

390 Section 201(2) of the NGL.

8.1.2 Summary of draft report findings and draft recommendations

The Commission found that the regulators' information gathering powers were comprehensive and fit for purpose. The ability of the regulators to issue RINs and RIOs, as well as the regulators' general information gathering power, appeared to provide the regulators with the necessary powers required to carry out their functions, including preparing and publishing reports on the financial and operational performance of full regulation and light regulation pipeline service providers.

The Commission did not recommend any related changes to the current framework.

8.1.3 Stakeholder submissions to draft report

Few stakeholders commented on this issue. The MEU did comment that:³⁹¹

“While the MEU notes that the AEMC considers that the regulator has sufficient powers to seek the sort of data that the AER obtains in the case of electricity networks, the fact that the regulators have not sought such information for gas transport is intriguing and the MEU considers that perhaps the information gathering powers of the regulator in the case of gas transport is not as strong as the AEMC purports in its assessment.”

8.1.4 Commission analysis

The Commission's view remains unchanged from the draft report and is that no changes need be made to the regulators' information gathering powers in relation to full and light regulation pipelines.

The information gathering provisions of the NGL and NEL relating to RINs and RIOs are all but identical, with differences almost exclusively confined to matters relating to the nature of the assets being regulated.³⁹² The MEU's concern is therefore not due to limitations in the regulators powers under the NGL.

8.2 Pipeline capacity and usage information

8.2.1 Current framework

Published capacity and usage information - full and light regulation pipelines

Full and light regulation pipeline service providers for all transmission pipelines and some distribution pipelines, as determined by the regulator,³⁹³ are required to establish and maintain a public register of spare capacity for their trunk or main pipeline or pipelines. The information on the register must include:³⁹⁴

³⁹¹ MEU submission to the draft report, p.18.

³⁹² NGL (Version: 1.8.2017) Chapter 2, Part 1 Divisions 3 to 5 and Part 2 Division 1. NEL (Version 15.12.2016) Part 3 Divisions 3 to 6.

³⁹³ Under Rule 111(2) of the NGR, for a distribution pipeline, the regulator must have regard to whether it is technically feasible and commercially reasonable for the service provider to maintain a register of spare capacity.

³⁹⁴ Rule 111(4) of the NGR.

- information about the spare capacity that the service provider reasonably believes currently exists for the haulage of natural gas between defined receipt and delivery points
- information about spare capacity that the service provider reasonably believes will exist in the future for the haulage of natural gas between defined receipt and delivery points, including information about planned developable capacity and expected additions to spare capacity
- information (which must be as specific as the circumstances reasonably allow) about when the spare capacity is, or will become, available
- information notified to the service provider by a user about unutilised contracted capacity including:
 - (i) the quantity and type of the unutilised contracted capacity and when it will be available
 - (ii) proposed terms and conditions (which may include the price) for the sale of the unutilised contracted capacity.

For full regulation pipelines an access arrangement must also be in place. An access arrangement contains, among other things, capacity trading requirements.³⁹⁵ Access arrangement information, which must be submitted with an access arrangement proposal,³⁹⁶ must also include usage of the pipeline over the earlier access arrangement period showing minimum, maximum and average demand, along with customer or user numbers. To the extent it is practicable, a forecast of pipeline capacity utilisation over the access arrangement period and the basis on which the forecast has been derived must also be provided.³⁹⁷

Some pipeline information is also contained within the Scheme Register. All pipelines that are, or have been, subject to any form of regulation or exemption from regulation under the NGL or the old scheme (that is, the code) must be included on the Scheme Register, which the AEMC maintains.³⁹⁸ When the description of a full regulation or light regulation pipeline is affected by an extension or capacity expansion, the service provider must give the AEMC a revised description of the pipeline, incorporating the extension or expansion, for inclusion in the register.³⁹⁹

Unpublished capacity and usage information - full and light regulation pipelines

A full or light regulation pipeline service provider must, on request and free of charge, inform a prospective user whether it can provide a requested service and if so, the terms and conditions on which it is prepared to provide the service. Users may be required to

³⁹⁵ Rule 48(1)(f) of the NGR.

³⁹⁶ Rule 43(1) of the NGR.

³⁹⁷ Rules 72(1)(a)(iii) and 72(d) of the NGR.

³⁹⁸ See section 8.5 for further discussion on the Scheme Register.

³⁹⁹ Rule 134 of the NGR.

meet costs if further investigations are required. The service provider must provide reasons if it cannot provide the requested service.⁴⁰⁰

Full and light regulation pipeline users must, on request and within 10 business days, disclose unutilised contracted capacity and whether it is, or is likely to become available.⁴⁰¹

A prospective user may request, through the regulator, the pipeline service provider to provide (free of charge) specified information that the prospective user reasonably requires in order to decide whether to seek access and, if so, how to go about applying for access.⁴⁰²

Capacity and usage information - Bulletin Board pipelines

Transmission pipelines that have an impact on the broader market are Bulletin Board pipelines and have an obligation to provide information to AEMO. AEMO must publish this information on its Bulletin Board, subject to certain aggregation, confidentiality and timing requirements.⁴⁰³ Most transmission pipelines are Bulletin Board pipelines.⁴⁰⁴ From September 2018 Bulletin Board pipelines that are lateral gathering pipelines may also be exempt from information disclosure obligations, and some participants may be exempt from providing information if the information is provided to AEMO by another person.⁴⁰⁵

The information that Bulletin Board pipeline service providers must provide to AEMO includes:⁴⁰⁶

- nameplate rating information
- detailed facility information
- information about shippers
- secondary trade data
- capacity outlooks
- 12 month outlook of uncontracted primary capacity
- linepack/capacity adequacy indicator

⁴⁰⁰ Rule 112 of the NGR.

⁴⁰¹ Rule 110 of the NGR.

⁴⁰² Rule 107 of the NGR.

⁴⁰³ Part 18, Division 2 of the NGR and Part 18, Division 7 of the National Gas Amendment (Improvements to Natural Gas Bulletin Board) Rule 2017 No.3.

⁴⁰⁴ From September 2018 exceptions will be pipelines that are below the reporting threshold of 10TJ/day and remote pipelines. See the National Gas Amendment (Improvements to Natural Gas Bulletin Board) Rule 2017 No.3, rules 141, 144 and 151.

⁴⁰⁵ National Gas Amendment (Improvements to Natural Gas Bulletin Board) Rule 2017 No.3, Rules 164(1) and 164(2).

⁴⁰⁶ Part 18, Division 5 of the NGR and Part 18, Division 5 of the National Gas Amendment (Improvements to Natural Gas Bulletin Board) Rule 2017 No. 3. West Australian Bulletin Board pipelines are subject to similar requirements as set out in Part 3, Division 2 of Western Australia's Gas Services Information Rules.

- nominated and forecast delivery information
- actual pipeline gas receipt and delivery information.

The above information disclosures are underpinned by more detailed requirements within the rules and also in the Bulletin Board procedures. A Bulletin Board pipeline may notify other Bulletin Board users that it has spare capacity available for purchase or capacity requirements.⁴⁰⁷

Capacity and usage information - non-scheme pipelines

Non-scheme pipeline service providers must, unless exempted,⁴⁰⁸ publish the following information, defined together as being "service and access information".⁴⁰⁹

- pipeline information for a transmission pipeline:
 - the pipeline's nameplate rating
 - details of all receipt and delivery points and key facilities to which those points connect
 - a schematic map showing the location of each receipt or delivery point and other key facilities
- pipeline information for a distribution pipeline:
 - the quantity of natural gas that can be transported through each gate station on the distribution pipeline in any 24 hour period
 - the details of all points on the pipeline where the service provider takes delivery of natural gas
 - a schematic map of the pipeline that shows the location on the pipeline of the points on the pipeline where the service provider takes delivery of natural gas and the geographic limits of the areas served by the pipeline
- pipeline information (for a transmission or a distribution pipeline):
 - any technical or physical characteristics that may affect access or price
 - policies that may affect access or pricing including queuing, changes to receipt and delivery points and metering and measurement
- pipeline service information including a list of services available on the pipeline and for each pipeline service:
 - a description of the service and locational limitations on availability
 - the priority ranking of the service in relation to other services, including in the event of curtailment

⁴⁰⁷ Rules 176 and 177 of the NGR and Part 18, Division 6 of the National Gas Amendment (Improvements to Natural Gas Bulletin Board) Rule 2017 No. 3.

⁴⁰⁸ Rule 585 of the NGR.

⁴⁰⁹ Rule 553 of the NGR.

- service usage information for each month including:
 - the quantity of gas injected into the pipeline
 - the quantity of gas withdrawn from the pipeline
 - the quantity of gas scheduled for injection
 - the quantity of gas scheduled for withdrawal
 - for scheduled quantities, the quantities attributable to each service
- service availability information including:
 - the firm capacity outlook (and the amount available and projected for sale) each month in the following 36 month period
 - information on any matters that may affect the capacity of the pipeline for each month in the following 12-month period.

The service availability information that service providers must publish for non-scheme pipelines is similar in nature to the information that service providers for full and light regulation pipelines are required to publish in their public register of spare capacity, as described earlier in this section 8.2.1. However, for full and light regulation pipelines outlook periods are not specified.

The service and usage information for non-scheme pipelines is updated every month.⁴¹⁰ Conversely, the similar access arrangement information for full regulation pipelines is updated only when a new access arrangement proposal is submitted.⁴¹¹ Where the information is also required to be provided to AEMO for publication on the Bulletin Board, the non-scheme pipeline service provider may instead make the information available by providing a publicly available link on its website to the part of the Bulletin Board where the information is located.⁴¹²

8.2.2 Summary of draft report findings and draft recommendations

In its draft report the Commission noted that prospective users require access to sufficient up to date capacity and usage information for them to form a view on available capacity in order to facilitate access, regardless of whether pipelines are full or light regulation.

For transmission pipelines the Commission found that there was a significant overlap between the Bulletin Board reporting requirements and the capacity and usage reporting requirements for non-scheme pipelines under Part 23 of the NGR and that the Bulletin Board reporting requirements were arguably more comprehensive. As most transmission pipelines are already Bulletin Board pipelines, the Commission's draft recommendation was that all full and light regulation transmission pipeline service providers disclose Bulletin Board information. That is, those scheme transmission

⁴¹⁰ Rule 552(2) of the NGR.

⁴¹¹ Rules 72(1)(a)(iii)(A) and 72(1)(d) of the NGR.

⁴¹² Rule 552(3)(b) of the NGR.

pipelines that are not currently Bulletin Board pipelines should also disclose information consistent with that required to be disclosed by Bulletin Board pipelines.

The Bulletin Board does not apply to distribution pipelines, so for distribution pipelines the Commission's draft recommendation aimed at harmonising capacity and usage disclosures with non-scheme distribution pipeline disclosures under Part 23 of the NGR.

As noted in section 8.2.1, the NGR also allows a prospective user to request, through the regulator, the pipeline service provider to provide (free of charge) specified information that the prospective user reasonably requires in order to decide whether to seek access and, if so, how to go about applying for access. The Commission considered that improvements could be made to this rule to explicitly provide the regulator with discretion over what information it forwards to the pipeline service provider, and to provide guidance on when that discretion should be exercised.

The draft recommendations included in the draft report were:

Draft recommendation 21: Require transmission pipeline service providers to disclose Bulletin Board information

To require all full and light regulation transmission pipeline service providers to disclose the same capacity and usage information that would be disclosed if they were Bulletin Board pipelines.

Draft recommendation 22: Require distribution pipeline service providers to disclose capacity and usage information

That full and light regulation distribution pipeline service providers publish the same set of capacity and usage information as non-scheme distribution pipeline service providers.

Draft recommendation 23: Clarify the role of the regulator in passing on information requests to service providers

To improve rule 107(2) of the NGR to make it clear that the regulator may decline to issue a notice to the scheme pipeline service provider for all or part of the prospective user's requested information if, in the regulator's reasonable opinion:

- the prospective user has not previously requested the information from the pipeline service provider
- the information is otherwise already available to the prospective user
- the pipeline service provider has not had sufficient time to provide the information requested to the prospective user, or
- the information is not reasonably required by the prospective user in order to decide whether to seek access to a service provided by the service provider, or to apply for access.

8.2.3 Stakeholder submissions to draft report

The ERA supported the draft recommendations, noting that in Western Australia draft recommendation 21 would need to be implemented through changes to Western Australia's Gas Service Information Rules.⁴¹³ The AER generally supported changes that increase information disclosure,⁴¹⁴ while the ACCC believed that the Part 23 disclosure requirements were more aligned to the objectives of facilitating timely negotiations than Bulletin Board disclosures. The ACCC cited as an example that Bulletin Board pipelines are required to publish information on uncontracted capacity for 12 months, while pipelines subject to Part 23 of the NGR are required to publish the information for a 36 month period.⁴¹⁵ The NCC supported the AEMC's approach to more closely align the information disclosure obligations with Part 23 of the NGR.⁴¹⁶

Origin Energy and EnergyAustralia were both supportive of the draft recommendations on capacity and usage information.⁴¹⁷

APGA agreed in general with the draft recommendations on capacity and usage information, but noted that draft recommendation 21 could be disproportionately more expensive for smaller pipelines who do not currently supply this information to the Bulletin Board.⁴¹⁸ AGIG commented that they "particularly support recommendations that improve transparency (for example, in Chapter 7 [of the draft report, on information])".⁴¹⁹ APA submitted that there should be no requirement to report nameplate capacity.⁴²⁰

Looking specifically at distribution pipeline reporting, Jemena agreed that appropriate transparency is required, but raised a number of issues with the draft recommendations. In particular, Jemena was concerned with balancing the additional costs and effort that would be required to comply with requirements against the benefit to users. It cited particular concerns with the ability of gas distribution pipeline service providers to meet the obligations under rule 553(4) of the NGR in a meaningful and accurate way.⁴²¹

ATCO had similar concerns to Jemena about draft recommendation 22, stating that "while the intent is to align the reporting requirements of the non-scheme pipelines with fully regulated pipelines, further consideration should be given to the practical differences relating to the operation of distribution pipelines".⁴²²

The MEU considered that the draft report approach was not sufficient and that additional reporting was required. The MEU cited the data that has been disclosed by

⁴¹³ ERA, submission to the draft report, p.11.

⁴¹⁴ AER, submission to the draft report, attachment p.2.

⁴¹⁵ ACCC, submission to the draft report, pp.12-13.

⁴¹⁶ NCC, submission to the draft report, p.2.

⁴¹⁷ Submissions to the draft report: Origin Energy p.1; EnergyAustralia, p.1.

⁴¹⁸ APGA, submission to the draft report, p.10.

⁴¹⁹ AGIG, submission to the draft report, covering letter p.1.

⁴²⁰ APA, submission to the draft report, p.29.

⁴²¹ Jemena, submission to the draft report, pp.4-5.

⁴²² ATCO, submission to the draft report, Attachment 1, p.4.

electricity networks through RINs as useful information. It also considered that the proposed change to clarify the role of the regulator in passing on information requests to service providers may not be in the interests of consumers "especially as the service provider has the power over the flow of information". However, the submission did not elaborate on why the MEU believed that the draft recommendation would provide service providers with such power.⁴²³ Central Petroleum supported the MEU's submission.⁴²⁴

8.2.4 Commission analysis

Transmission pipelines

The Commission maintains its view that all full regulation and light regulation transmission pipelines should disclose Bulletin Board information. Prospective users require sufficient up to date capacity and usage information for them to form a view on available capacity in order to facilitate decisions about negotiation for access and, if necessary, arbitration. The approach has broad support and would provide comprehensive capacity and usage information at the least cost. The AEMC has also engaged with AEMO and has determined that the most efficient and effective means of achieving this outcome is for all scheme transmission pipelines to become Bulletin Board pipelines. This leverages the existing framework, provides consistency and oversight and also allows the Bulletin Board to move further towards being a 'one stop shop' for information as intended by the reforms recommended in the AEMC's East coast gas review.

Further, the Commission understands that while there are currently four full or light regulation transmission pipelines that are not Bulletin Board pipelines, only two (the Central West Pipeline and the Kalgoorlie to Kambalda Pipeline) would currently be impacted if all full regulation and light regulation pipelines become Bulletin Board pipelines. This is because of the following:

- the Amadeus Gas Pipeline will become a Bulletin Board pipeline within 90 days after the date on which the pipeline from Tennant Creek to Mt. Isa (the Northern Gas Pipeline) joins the Northern Territory to the east coast gas network.⁴²⁵ The Commission understands that the first gas is scheduled to flow in late 2018.⁴²⁶
- the Central Ranges Pipeline will cease being a scheme pipeline when its access arrangement expires on 1 July 2019.⁴²⁷ From this date, it will not be required to provide Bulletin Board information if it continues to fall under the 10TJ/day capacity threshold.

⁴²³ MEU, submission to the draft report, pp. 17 & 21.

⁴²⁴ Central Petroleum, submission to the draft report, p.1.

⁴²⁵ Rule 143 of the National Gas Amendment (Improvements to Natural Gas Bulletin Board) Rule 2017 No.3.

⁴²⁶ <http://jemen.com.au/industry/pipelines/northern-gas-pipeline>, accessed 21 June 2018.

⁴²⁷ Letter from the AER to the APA Group, Re: Central Ranges Pipeline and Network Access Arrangements, 6 February 2018.

The vast majority of full and light regulation pipelines would incur no additional costs, apart from those associated with the Commission's proposed minor Bulletin Board enhancements.

Any transmission pipelines that become full or light regulation pipelines in the future and are not otherwise Bulletin Board pipelines will also be impacted by the Commission's recommendations.

The Commission notes the ACCC's concerns that some capacity and usage information that non-scheme pipelines are required to report under Part 23 of the NGR is not disclosed on the Bulletin Board. In further discussions the ACCC has clarified that its material concern relates to the example that it raised about the notice users have of uncontracted capacity becoming available. Having considered this further and tested this with users and AEMO the Commission proposes addressing this concern by extending the outlook of uncontracted primary pipeline capacity for all Bulletin Board pipelines from 12 months to 36 months. This can be implemented through a change to the relevant requirements in Part 18 of the NGR which relates to the Bulletin Board.

Rule 553(4)(e) of the NGR, which applies to non-scheme pipelines, also requires scheduled quantities to be attributed to particular pipeline services. Bulletin Board pipeline service providers could also be required to break down by service the more detailed aggregated nominated and forecast delivery information that they will be required to report from 30 September 2018.⁴²⁸ The AEMC understands that this is unlikely to significantly increase the information disclosure-related workload of service providers, who at present have to aggregate this information for reporting purposes. However, reporting disaggregated information potentially reveals information that users consider to be commercially sensitive. While submissions from pipeline users and prospective pipeline users were generally supportive of increased information disclosure, there were no submissions specifically on this point. Consequently the Commission has not included a recommendation for disaggregated reporting of gas injections and withdrawals by service. The Commission notes that stakeholders would have a further opportunity for comment on this issue as part of the rule making process.

Once the above recommendations are implemented then the public registers of spare capacity required under rule 111 of the NGR will also no longer be required, as spare capacity information will be available from the Bulletin Board. Accordingly, deletion of this rule is recommended.

Distribution pipelines

The Commission's draft recommendation was for full and light regulation distribution pipeline service providers to publish the same set of capacity and usage information as non-scheme distribution pipeline service providers. The Commission recommended adopting the existing Part 23 framework because:

- the existing level of disclosure for full and light regulation pipelines is inadequate

⁴²⁸ Rule 183 of the National Gas Amendment (Improvements to Natural Gas Bulletin Board) Rule 2017 No.3.

- users, consumer representatives and regulators supported extending the information disclosure requirements under Part 23 of the NGR to full and light regulation pipelines
- Part 23 reporting requirements apply to distribution pipelines
- requiring pipeline service providers to report using an existing framework would result in lower costs compared to requiring reporting of similar information under a new reporting framework
- capacity and usage reporting for full and light regulation pipelines is required for the same reasons as for non-scheme pipelines: to facilitate negotiation and decisions to trigger dispute resolution.

However, the AEMC now understands that the relevant Part 23 requirements have not been implemented in practice for distribution pipelines as all of the non-scheme distribution pipelines meet one or more of the exemption criteria.

Also, further investigation of the issues raised in Jemena's submission has revealed that some of the capacity and usage reporting requirements under Part 23 of the NGR are problematic for distribution pipelines. In particular, rules 553(4)(b)-553(5) cannot be reported by gas distribution pipelines. One of the reasons is the definition of "pipelines" in the NGL. "Pipelines" is defined as including a system of pipes and so encompasses the entire distribution network. However, rule 553(5), which requires information on capacity outlooks or "service availability" to be reported, can only be practically applied to individual trunk pipes in distribution networks, and not to every downstream pipe within the total network. Similarly, rules 553(4)(b)-(e) are designed to capture pipeline usage, but rely on scheduling information and real time metering information which is not available at lower levels within the distribution network. Submissions received during the development of Part 23 of the NGR did not raise these issues. This may have been, at least in part, due to the likely exemption of all existing non-scheme distribution networks from the relevant reporting requirements.

The Commission has therefore adjusted its recommendation in order to create a workable reporting regime for full and light regulation distribution pipelines.

Firstly, the Commission continues to recommend mirroring rules 553(2)-(3) for distribution pipelines. These rules require descriptive information about the pipeline and the services available on it. The Commission also continues to recommend mirroring rule 553(4)(a). This requires monthly reporting of the total quantity of natural gas metered as having been injected into the pipeline. These requirements assist all users by providing general information about the distribution pipeline, supporting well informed decision making regarding the use of pipeline services. The Commission considers that these requirements are relevant and workable for full and light regulation distribution pipelines.

Secondly, in the Commission's view, the additional reporting requirements in rules 553(4)(b) to 553(4)(e) of the NGR should be modified to suit distribution pipelines. The Commission also considers that these modified reporting requirements, along with the reporting requirements under rule 553(5), should only apply to large or trunk distribution pipes.

Large or trunk distribution pipes perform a similar function to transmission pipelines. Indeed, they sometimes compete directly with transmission pipelines.⁴²⁹ They are the pipes that shippers may use to move bulk quantities of gas or to bypass lower levels of the distribution network. They are also pipes that large users, such as gas fired electricity generators,⁴³⁰ producers⁴³¹ and storage facility operators⁴³² connect to where they are located within a distribution pipeline area. While there is no bright dividing line, lower levels of the distribution network become more interconnected with other elements of the same network. Moreover, the relevance of, and ability to report, certain information is reduced.

The AEMC also understands that flow optimisation and capacity augmentation at lower levels of gas distribution networks tend to be in response to general load growth within a geographic area and that interrelationships between load and demand elements, as well as multiple options for augmenting and reconfiguring the network, make spare capacity metrics less meaningful inside these areas of integrated pipes within distribution networks.

Real time measured information on flows within individual pipes deep within distribution networks is also scant, with flow measurements tending to be restricted to some pressure reduction points and some large customer connections. Network monitoring, augmentation and management are instead focussed on maintaining pressures, which are monitored more broadly.

With these operational considerations in mind, the Commission considers that a practical threshold would be to require detailed capacity and usage reporting for pipes with a capacity of greater than 10TJ/day and an operating pressure of greater than 4MPa.

The AEMC understands that gas flows across almost all of the entry and exit points from major ("trunk") distribution pipes are metered but that, except where revenue metering is installed, the measurement accuracy is well below revenue metering standards. However, real time data is collected from these metering points and that data could be exported to an accessible file. Making this existing data available to users would be a cost effective means of meeting users' requests for capacity and usage information for distribution pipelines. In addition, pressure is monitored at the same locations and the capacity of the entry or exit point is dependent on pressure that exists at the time. Lower pressure means lower capacity. It is therefore not possible to infer spare capacity solely from flow data, in the absence of contemporaneous pressure data.

Given these practical considerations, the Commission recommends the following reporting be required on for large pipes within distribution pipelines:

- For each entry and exit point:

⁴²⁹ For example, Jemena's distribution pipeline between Port Kembla and Horsley Park runs in parallel to the Eastern Gas Pipeline.

⁴³⁰ For example, Snowy Hydro's Colongra power station.

⁴³¹ For example, AGL's Camden gas project.

⁴³² For example, AGL's Tomago storage facility.

- daily flow data (as defined in Part 18 of the NGR commencing 30 September 2018)
- the daily pressure profile, being the pressure, averaged over the shortest reasonably practical period, reported by period
- a static table showing the maximum flow rate of the entry or exit point against pressure.
- For metered entry and exit points:
 - the daily flow profile, being the gas flow rate, averaged over the shortest reasonably practical period, reported by period

The Commission recommends that this detailed capacity and usage information be published on the service provider's own website as distribution pipelines are not Bulletin Board pipelines.

The role of the regulator in passing on information requests to service providers

The Commission has maintained its position on clarifying the role of the regulator in passing on information requests to service providers. The Commission considers that the regulator should be provided with the discretion to decide whether it is appropriate to pass on all or part of an information request. The recommended changes clarify the regulator's role as a backstop for users, rather than a potential first port of call, if users and prospective users have sought but not received the information from a service provider and where the information is genuinely required.

Rule 107(2) of the NGR should be altered to make it clear that the regulator may decline to issue a notice to the scheme pipeline service provider for all or part of the prospective user's requested information if, in the regulator's reasonable opinion:

- the prospective user has not previously requested the information from the pipeline service provider
- the information is otherwise already available to the prospective user
- the pipeline service provider has not had sufficient time to provide the information requested to the prospective user, or
- the information is not reasonably required by the prospective user in order to decide whether to seek access to a service provided by the service provider, or to apply for access.

These recommended changes should encourage prospective users and pipeline service providers to exchange sufficient information in an efficient and timely manner. Efficient and timely information exchange helps to minimise costs, which is ultimately in the long term interests of consumers, consistent with achieving the NGO.

8.2.5 Final recommendations

Recommendation 21: Require transmission pipeline service providers to disclose augmented Bulletin Board information

Amend the NGR in order to:

- require all full and light regulation transmission pipelines to become Bulletin Board pipelines
- augment Bulletin Board reporting for transmission pipelines so that the outlook of uncontracted primary pipeline capacity for Bulletin Board pipelines is extended from 12 months to 36 months
- remove the requirement for scheme pipeline service providers to establish and maintain a public register of spare capacity.

This recommendation will be effected through amendments to rules 141, 145 and 177, and the omission of rule 111 of the NGR.

Recommendation 22: Require distribution pipeline service providers to disclose capacity and usage information

Require all full and light regulation distribution pipelines to publish capacity and usage information that is based on the information requirements applying to non-scheme pipelines, modified to be more suitable for distribution pipelines.

The Commission's recommendation is reflected in proposed new rules 35B, 36A to 36C in Part 7, and 112A to 112D in Part 11 of the NGR.

Recommendation 23: Clarify the role of the regulator in passing on information requests to service providers

Provide the regulator with the ability to decide whether or not to pass on all or part of an information request, subject to guidance.

The Commission's recommendation is reflected in draft amendments to rule 107 of the NGR.

8.3 Pipeline financial and offer information

8.3.1 Current framework

Financial and offer information - full regulation pipelines

Negotiation of tariff and non-tariff terms and conditions for full regulation pipelines is informed by the applicable access arrangement. An access arrangement substantially reduces the work that a user or prospective user needs to undertake to determine appropriate tariff and non-tariff terms and conditions for access. It also provides a higher degree of certainty about the outcome of any dispute resolution regarding tariff or non-tariff terms and conditions. Further, while circumstances may change during the period that a full access arrangement is in force, the reference tariff and non-tariff terms and conditions remain as set at the time of the determination, subject only to

adjustments made in accordance with the approved access arrangement.⁴³³ The reference tariff and non-tariff terms and conditions therefore remain known, regardless of externalities or other changes that may impact the pipeline.⁴³⁴

The financial information submitted with a full access arrangement proposal is comprehensive. Part 9 of the NGR sets out, among other things, the building block approach to determining revenue and prescribes in detail the information that must be provided in support of each building block component. It also sets out requirements for allocating revenue between reference services and other services, and for designing reference tariffs. The regulator is required to publish an access arrangement proposal and access arrangement information, subject to confidentiality considerations.⁴³⁵

As noted previously, in addition to access arrangements, the regulators' functions and powers include "to prepare and publish reports on the financial and operational performance of service providers in providing pipeline services by means of covered pipelines".⁴³⁶ Such reports, if prepared, would also be available to prospective users.

Separately to published information, a pipeline service provider must, on request, fix and notify a tariff to a prospective user where a tariff for a particular service is not published.⁴³⁷ It should be possible for prospective users to form a view on whether or not this is an appropriate tariff for a non-reference service from the reference tariff and from the comprehensive access arrangement information provided to the regulator. The information required by prospective users is the information that allows them to estimate the difference between the cost of the reference service and the cost of the service that they require from the pipeline.

This is very different to the situation for light regulation pipelines and for non-scheme pipelines. In these cases, contracts are negotiated or arbitrated in the absence of a regulator approved full access arrangement and the associated full access arrangement information, including cost information and reference service tariffs.

Financial and offer information - light regulation pipelines

The published financial information available to prospective users of light regulation pipelines is minimal by comparison with full regulation pipelines. Part 9 of the NGR does not apply to light regulation pipelines, so there is no obligation to publish information on revenues, costs and information underpinning the allocation of costs to particular tariffs.⁴³⁸

Light regulation pipeline service providers are required to publish:⁴³⁹

- prices on offer for light regulation services

⁴³³ Rules 97(5) and 92(1) of the NGR.

⁴³⁴ Chapter 5 of this report also recommends improvements to the approach of determining reference services.

⁴³⁵ AER, Access arrangement guideline, March 2009, pp. 33-35.

⁴³⁶ Section 27(1)(f) of the NGL.

⁴³⁷ Rule 108 of the NGR.

⁴³⁸ Rule 70 of the NGR.

⁴³⁹ Rule 36(1) of the NGR.

- other non-tariff terms and conditions.

As with full regulation pipelines a pipeline service provider must, on request, fix and notify a tariff to a prospective user where a tariff for a particular service is not published.⁴⁴⁰

The service provider is also required to report at least annually to the regulator on access negotiations and the regulator may, from time to time, publish an assessment of such information reported to it by service providers.⁴⁴¹ Light regulation pipeline service providers can choose to submit a limited access arrangement to the regulator for approval.⁴⁴² However, no service providers have done so to date.

As with full regulation pipelines, the regulators' functions and powers include the preparation and publication of reports on the financial and operational performance of service providers and such reports, if prepared, would be available to prospective users.

Financial and offer information - non-scheme pipelines

A service provider for a non-scheme pipeline must publish the following information:⁴⁴³

- standing terms:
 - standard terms and conditions
 - standing price for the service
 - other relevant pricing and charging information, for example charging structure, minimum charges, other additional charges such as imbalance or overrun charges

⁴⁴⁰ Rule 108 of the NGR.

⁴⁴¹ Rule 37 of the NGR.

⁴⁴² Section 116 of the NGL.

⁴⁴³ Rules 554 – 556 of the NGR.

- certified financial information about each pipeline in accordance with the financial reporting guidelines, including:⁴⁴⁴
 - financial statements
 - asset values
 - depreciation allowances
 - cost allocations
 - financial performance metrics
 - weighted average price.

The AER's financial reporting guideline prescribes:⁴⁴⁵

- the form and content of the financial information required to be published
- the methodology, principles and inputs used to calculate the financial information
- the form and content of the weighted average price information to be published
- the manner in which the above information must be certified by an independent auditor.

8.3.2 Summary of draft report findings and draft recommendations

The Commission found that light regulation pipeline service providers are currently required to publish minimal financial information and indeed substantially less information than non-scheme pipeline service providers. It would be appropriate for users to be provided with greater support in their negotiations by publishing the same information as published by non-scheme pipeline service providers.

For full regulation pipelines, the Commission concluded that additional financial information reporting was not required. On full regulation pipelines users of reference services have direct access to reference tariffs along with terms and conditions for the reference service. Users of non-reference services could negotiate access with reference to the reference service tariffs, terms and conditions, adjusted for costs or savings associated with the service that they were seeking. The access arrangement and other information published as part of the access arrangement determination process provides a relatively comprehensive set of financial information, allowing users and prospective users to make an informed view on adjustments from the reference tariff. The Commission's draft recommendations in relation to the approach to determining reference services would also improve the relevance of those services. Consequently, the Commission found that no change to the financial reporting framework for full regulation pipelines is required at this time.

Accordingly, a draft recommendation was made in relation to light regulation pipelines only.

⁴⁴⁴ Rule 557 of the NGR.

⁴⁴⁵ AER, *Financial reporting guidelines for non-scheme pipelines*, December 2017, p.1.

Draft recommendation 24: Introduce a financial and offer information disclosure regime for light regulation pipelines

That light regulation pipeline service providers publish the same set of financial and offer information as non-scheme pipeline service providers.

8.3.3 Stakeholder submissions to draft report

The ACCC submitted that financial and offer information should mirror the Part 23 reporting requirements for all pipelines, including full regulation pipelines.⁴⁴⁶ It suggested that financial and offer information should be extended to full regulation pipelines because users of these pipelines also have to negotiate with pipeline operators, and that where a shipper seeks a non-reference service then the shipper could benefit from the annual disclosure of financial information under Part 23.⁴⁴⁷

In contrast, the ERA supported the draft recommendation. It considered that there is a gap in the level of information provided to prospective users of light regulation pipelines.⁴⁴⁸

The AER also supported the draft recommendation.⁴⁴⁹

EnergyAustralia supported the draft recommendations in the report covering information disclosure requirements for covered and uncovered pipelines.⁴⁵⁰

The EUAA strongly supported the draft recommendations around increased information disclosure for light and fully regulated pipelines. However, it felt that the additional information would be of limited value without a prescriptive and binding depreciation methodology.⁴⁵¹

The MEU thought that annual reporting, similar to that provided through RINs and RIOs for electricity networks, would be useful.⁴⁵²

However, APA suggested that no change from the current arrangements was necessary and that reporting outcomes can already be achieved without a rule change through RINs and RIOs if reporting is of value to consumers.⁴⁵³

APGA also submitted that the draft recommendation should not be adopted. The heart of its objection appears to be that the combination of published offer prices under rule 36 of the NGR, the publication of the "standard posted tariff",⁴⁵⁴ and the service provider's knowledge of their own price could allow a user or prospective users to back solve their competitor's price, thereby giving them access to confidential information.

⁴⁴⁶ ACCC, submission to the draft report, p.12.

⁴⁴⁷ ACCC, submission to the draft report, p.13.

⁴⁴⁸ ERA, submission to the draft report, pp.11-12.

⁴⁴⁹ AER, submission to the draft report, p.5 and attachment p.2.

⁴⁵⁰ EnergyAustralia, submission to the draft report, p.1.

⁴⁵¹ EUAA, submission to the draft report, pp. 6-7. This issue is addressed in Chapter 7.

⁴⁵² MEU, submission to the draft report, p.17.

⁴⁵³ AP, submission to the draft report, p.29.

⁴⁵⁴ The AEMC takes this to mean the standing price under the service provider's standard terms and conditions in rule 554 of the NGR.

APGA also noted that under s.136 of the NGL price discrimination is allowed where it is efficient.⁴⁵⁵

8.3.4 Commission analysis

The Commission acknowledges the ACCC view that users seeking non-reference services on pipelines subject to full regulation could potentially obtain some benefit from annual disclosure of financial information under Part 23. However, the Commission believes that the benefit is likely to be limited. As users will be negotiating against the reference tariff then it is the information that underpins the reference tariffs and associated revenues that is likely to be of most benefit, and this information is already available. The Commission has therefore maintained its conclusion that the Part 23 financial information should only need to be published for light regulation pipelines, where users and prospective users do not have the benefit of regulator approved reference tariffs, or the access arrangement information that underpins them.⁴⁵⁶

As noted by APA and the MEU, RINs and RIOs could potentially be used for financial reporting for full and light regulation pipelines even though the regulators have not yet elected to use them for this purpose. However, the NGR do not require financial reporting for light regulation pipelines. The Commission considers that users and prospective users of light regulation pipelines need comprehensive financial information in order to address information asymmetry and to facilitate negotiation with service providers on an informed basis. Because of this, the Commission considers that financial reporting should be an ongoing and consistent obligation and has recommended rules on this basis. The RIN and RIO processes are unnecessary and inappropriate where the rules mandate disclosure.

As discussed in Chapter 7, the capital base for light regulation pipelines will be calculated in a manner consistent with the method applying to full regulation pipelines. This differs from the valuation method set out in rule 569(4) for non-scheme pipelines, which requires a particular valuation method to be applied in some circumstances. This valuation technique is reflected in section 4 of the AER's financial reporting guidelines for non-scheme pipelines.⁴⁵⁷ The NGR also provides guidance on how costs are to be allocated for full regulation pipelines.⁴⁵⁸ The Commission considers that capital base reporting and cost allocation for light regulation pipelines should be on a basis consistent with the price and revenue regulation framework for full regulation pipelines. The proposed draft rules therefore require the capital base and cost allocation to be reported in a manner consistent with the methods and principles applying to full regulation pipelines.

The proposed draft rules set out, at a high level, consistent with Part 23 of the NGR, the information that service providers will need to disclose to assist users assessing whether prices are reasonable. The proposed rules then require the regulators to consult

455 Australian Pipeline and Gas Association submission to the draft report, p.10.

456 The Commission also notes that prospective users will continue to be able to require a pipeline service provider to provide information through the regulator under rule 107(2) of the NGR

457 AER Financial reporting guidelines for non-scheme pipelines, December 2017, pp.18-19.

458 Rule 93 of the NGR

on the development of financial reporting guidelines that will set out the detailed reporting requirements.

As alluded to by APGA, rule 554 in Part 23 of the NGR requires standing terms and prices to be reported for non-scheme pipelines, and rule 36 of the NGR requires prices on offer, along with terms and conditions to be reported for light regulation pipelines. These two rules appear to be broadly equivalent, with one material exception. Rule 554 requires the methodology used to calculate the standing price to be disclosed, but rule 36 does not. Determining whether or not a price being offered is reasonable would be difficult in the absence of the methodology used to calculate it, and the Commission recommends amending rule 36 to also require the pricing methodology to be disclosed for light regulation pipelines in order to assist users and prospective users in determining whether the price that they are being offered is reasonable.

More broadly, requiring financial and offer information disclosure for light regulation pipelines should enable users and prospective users to negotiate prices, terms and conditions on an informed basis, mitigating potential monopoly power and leading to better prices flowing through to consumers, consistent with achieving the NGO.

8.3.5 Final recommendation

Recommendation 24: Introduce a financial and offer information disclosure regime for light regulation pipelines

Require that light regulation pipeline service providers publish a financial and offer information set out in the NGR, based on the requirements that apply to non-scheme pipeline service providers but adjusted so that the reported capital base is calculated in a manner consistent with the method applying to full regulation pipelines.

The Commission's recommendation is reflected in amendments to rule 36 and proposed rules 35B, 36A, 36D, 36E and 36F in Part 7 of the NGR.

8.4 Key performance indicators

8.4.1 Current framework

The NGR provides that access arrangement information must include key performance indicators (KPIs) for the pipeline.⁴⁵⁹ In the case of full access arrangements, the NGR state that the KPIs are "to be used by the service provider to support expenditure to be incurred over the access arrangement period".⁴⁶⁰ No further guidance is given on the purpose or choice of KPIs. This has led to a divergent set of KPIs being adopted across pipeline service providers.

8.4.2 Summary of draft report findings and draft recommendations

In the draft report, the Commission stated that KPIs appear to have three potential purposes, being to provide:

⁴⁵⁹ Rules 45(2)(b), 72(1)(f) and 129(2)(b) of the NGR.

⁴⁶⁰ Rule 72(1)(f) of the NGR.

- benchmarking and performance information for users, as an input into their negotiation and arbitration
- information for the regulator to use for monitoring and revenue or price regulation, including through benchmarking
- linkages to incentives in the regulatory framework.

The Commission considered that consistency across pipelines and over time along with comprehensiveness seems critical to KPI usefulness and that this is best achieved by the regulator setting out, following relevant consultation, the information that is to be collected, reported and published. The Commission concluded that RINs and RIOs were the appropriate instruments for this purpose. As a result, a draft recommendation was made to remove KPIs from the access arrangement information requirements

Draft recommendation 25: Remove the requirement to provide KPIs as part of the access arrangement

That the requirements in the NGR on service providers to include KPIs in an access arrangement be removed. Regulators should instead set and collect KPIs through RINs and RIOs.

8.4.3 Stakeholder submissions to draft report

APA supported the draft recommendation, noting that the original purpose was to support revenue proposals, but that this is not the way KPIs have been used.⁴⁶¹ ATCO also supported the draft recommendation, stating that "KPIs have a range of potential purposes and are not comparable across businesses."⁴⁶²

However, some stakeholders felt that KPIs should be retained.

AusNet opposed replacing KPIs with RIN or RIO reporting, suggesting that this would increase compliance costs.⁴⁶³

The MEU also questioned whether KPIs should be retained given its concern that the regulators may not have sufficient information gathering powers.⁴⁶⁴

The ERA suggested that, rather than removing the KPIs, the AEMC should consider "strengthening the link between forecast expenditure and the KPIs used" which "should be agreed with the regulator". The service provider would then "base its expenditure/investment decisions on meeting its KPI expectations."⁴⁶⁵ The submission went on to note that "without changes to the KPI requirement specified above then there is no link between expenditure forecasts and service delivery/efficiency of network." The submission accepted that the "RIN/RIO is best used to collect the

461 APA, submission to the draft report, pp. 29-30.

462 ATCO, submission to the draft report, Attachment 1, p. 4

463 AusNet, submission to the draft report, p. 1.

464 MEU, submission on the draft report, pp. 17-18, 21.

465 ERA, submission to the draft report, p. 2.

information so the regulator can understand the service provider's performance against these KPIs."⁴⁶⁶

8.4.4 Commission analysis

As set out in section 8.1, the Commission considers that regulators currently have sufficient information gathering powers.

The Commission does not accept the argument that RIN or RIO reporting would increase compliance costs and therefore should not be used instead of KPIs. Both the RIN and RIO processes provide for consultation and require the regulator to have regard to "the likely costs that may be incurred by an efficient scheme pipeline service provider in complying with the notice or order."⁴⁶⁷ Requiring consideration of the need for information provides some control of the costs that may arise from compliance.⁴⁶⁸

The Commission agrees with the ERA that it is important for there to be a link between expenditure forecasts and service levels. Higher service levels cost more to deliver than lower service levels, and service providers can transfer costs to users by reducing their service levels.

The NGR provide guidance in setting service levels for the purpose of assessing capital and operating expenditure. For example, rule 79(2) provides that capital expenditure is justifiable if (among other things):

- it is required in order to:
 - comply with a regulatory obligation (which might include jurisdictional safety, technical or reliability obligations)
 - maintain and improve the safety of services or
 - maintain integrity of services.
- the overall economic value of the expenditure is positive.

It is therefore necessary for capital expenditure allowances to be set in relation to the outcomes that are to be achieved.

The operating expenditure criteria in rule 91 are less prescriptive.

The Commission does not consider that KPIs are the best mechanism for setting service levels that are used to assess expenditure forecasts given that the NGR already sets out how forecast expenditure is to be assessed. The Commission is also concerned that such an approach would not result in consequences for the service provider if the KPIs were not met.

Instead, the Commission considers that the appropriate vehicles for encapsulating service levels are:⁴⁶⁹

⁴⁶⁶ ERA, submission to the draft report, p. 12.

⁴⁶⁷ Section 48(2)(b) of the NGL.

⁴⁶⁸ The AER must also exercise its powers in a manner that will or is likely to contribute to the achievement of the national gas objective. See section 28(a) of the NGL.

⁴⁶⁹ Noting any jurisdictional requirements.

- specifying the required levels of service in the reference service terms and conditions in an access arrangement
- using the regulators' powers to develop incentive mechanisms.

Under these vehicles, a failure to meet targets will have consequences. RINs and RIOs are the best mechanisms for collecting information related to those service levels on an ongoing basis.

The existing mechanism under rule 98 of the NGR allows for incentive mechanisms to encourage economic efficiency in the provision of services. Further, NGR rule 71(1) specifically provides for the regulator to infer efficiency of capital or operating expenditure from the operation of an incentive mechanism. The Commission considers that incentive mechanisms and service terms and conditions are the most appropriate mechanism for regulators to use to link expenditure and service levels. Incentive mechanisms related to service levels have not been used by the regulators under the NGR to date, but are relatively commonly used under the NER and by overseas regulators such as Ofgem in Great Britain.

The Commission has therefore decided to maintain its draft recommendation to remove KPIs from the access arrangement information requirements because the service level outcomes related to determining reference tariffs can be better dealt with through existing mechanisms. These existing mechanisms can be tailored to the pipeline by the regulator and service provider, with targets supported through the application of incentives.

8.4.5 Final recommendation

Recommendation 25: Remove the requirement to provide KPIs as part of the access arrangement information

Remove the requirements on service providers to include KPIs in the access arrangement information.

The Commission's recommendation is reflected in the draft amendments to rules 45 and 72 of the NGR.

8.5 Scheme Register

8.5.1 Current framework

The AEMC maintains a public Scheme Register in accordance with the requirements of Part 15 of the NGR.⁴⁷⁰ The Scheme Register is a register of all pipelines that are, or have been, subject to any form of regulation or exemption from regulation under the NGL and the NGR, or the old scheme.⁴⁷¹

⁴⁷⁰ <https://www.aemc.gov.au/energy-system/gas/gas-scheme-register>.

⁴⁷¹ Rules 3 and 133(2) of the NGR. An old scheme transmission or distribution pipeline is defined in s. 2 of the NGL as a transmission or distribution pipeline that was, at any time before the repeal of the old access law, a transmission or distribution pipeline as defined in that law and a covered pipeline as defined in the code.

The Scheme Register is yet to be updated for pipelines that are captured solely as a result of them being regulated under Part 23 of the NGR. However, there has been difficulty in obtaining information from some of the service providers for non-scheme pipelines. The GMRG team noted similar difficulties encountered during its work.

The Scheme Register includes, for each pipeline, a description of the pipeline and the pipeline's classification and regulatory history under the NGL and the code. The Scheme Register is also required to include the text of various decisions relating to pipelines that are currently or were formerly covered, or that are or were subject to greenfields pipeline incentives.⁴⁷² The AEMC provides access to the Scheme Register on its website, through a text based menu and also through an interactive pipeline map.

8.5.2 Summary of draft report findings and draft recommendations

The making of the National Gas (Pipelines Access - Arbitration) Amendment Rules 2017 (Part 23 of the NGR) brought non-scheme pipelines within the remit of the Scheme Register as these pipelines became subject to a form of regulation under the NGR.

The Scheme Register was originally designed to capture information relevant to scheme pipelines. The information captured was not optimal for non-scheme pipelines. For example, only scheme pipelines were required to notify the AEMC of extensions or capacity expansions, and while information related to the pipeline's regulatory history as a scheme pipeline was included, information related to its regulatory history as a non-scheme pipeline was not.

The Commission therefore recommended improvements to the Scheme Register in order to provide a central repository of key regulatory information for pipelines, to minimise search costs for users and service providers, and to provide a more useful resource for regulators and policy makers. At the same time, the Commission recommended changing the register's name to reflect the expansion of its coverage to non-scheme pipelines, and some minor administrative updates.

Draft recommendation 26: Improve the Scheme Register

That the NGR be amended such that:

- service providers for non-scheme pipelines be required to provide the AEMC with a description of the pipeline upon commencement of the relevant rule. Subsequently, both scheme and non-scheme pipeline service providers should be required to provide a description of the pipeline for inclusion in the register whenever a new pipeline is built or when it is affected by an extension or expansion
- the Scheme Register's contents be expanded to include published information about access determinations made under Division 4 of Part 23 of the NGR and exemption decisions made under Division 6 of Part 23 of the NGR
- the name Scheme Register be changed to Pipeline Register

⁴⁷² Rule 133(4) of the NGR.

- the current requirement for the Scheme Register to be made available for inspection at the AEMC's public offices during business hours be removed from the NGR.

8.5.3 Stakeholder submissions to draft report

Few submissions were received on the draft recommendation. Of those received:

- the ERA supported the changes, which it said would assist users and potential users of pipelines.⁴⁷³
- the MEU supported the draft recommendation.⁴⁷⁴

8.5.4 Commission analysis

No concerns or objections have been raised on the draft recommendation, and the Commission is not aware of any other issues that would change its draft position.

The final recommendation set out below reflects the analysis made in the draft report as summarised above, and also notes initial opening capital base determinations for light regulation pipelines. The Commission considers that the recommended changes to the Scheme Register provide a central information depository for all stakeholders and is consistent with achieving the NGO.

8.5.5 Final recommendation

Recommendation 26: Improve the Scheme Register

Amend the NGR such that:

- service providers for non-scheme pipelines be required to provide the AEMC with a description of the pipeline upon commencement of the relevant rule. Subsequently, both scheme and non-scheme pipeline service providers should be required to provide a description of the pipeline for inclusion in the register whenever a new pipeline is built or when it is affected by an extension or expansion
- the Scheme Register's contents be expanded to include published information about:
 - access determinations made under Division 4 of Part 23 of the NGR
 - exemption decisions made under Division 6 of Part 23 of the NGR
 - initial opening capital base determinations for light regulation pipelines
- the name Scheme Register be changed to Pipeline Register
- the current requirement for the Scheme Register to be made available for inspection at the AEMC's public offices during business hours be removed from the NGR.⁴⁷⁵

⁴⁷³ ERA, submission to the draft report, pp.12-13.

⁴⁷⁴ MEU submission to the draft report, p.21.

The Commission's recommendation is reflected in the draft amendments to rules 133 to 135, and proposed new rule 135A in Part 14 of the NGR.

⁴⁷⁵ The register will continue to be available on the AEMC website

9 Arbitration

Box 9.1 Summary of findings and recommendations

The economic regulation framework for natural gas pipelines under the NGL and NGR is a negotiate-arbitrate regime. An efficient and effective dispute resolution framework is integral in providing a credible threat to stakeholders to engage in successful access negotiations, and to provide efficient outcomes in the event that a dispute is raised.

During this review, stakeholders have expressed some concerns regarding the operation of dispute resolution under the current framework in the NGL and NGR. In particular, several stakeholders considered that greater prescription in the NGL and NGR is needed in order to provide guidance on the process and decision making criteria used to resolve disputes. The Commission's findings and recommendations in relation to arbitration on scheme pipelines are summarised as follows:

- set out a more detailed process for parties to negotiate access to scheme pipelines, such that failure to agree within the negotiation timeframes would trigger the dispute resolution process
- maintain the identity of the dispute resolution body as currently set out in the NGL to minimise cost, achieve consistency of outcomes and enhance accountability for determinations
- clarify and expand the role of the dispute resolution expert
- introduce a reference framework for the dispute resolution body under the NGL and NGR, in order to clarify the basis of any arbitration outcomes under the framework
- set out a fast-tracked dispute resolution process based on a set of criteria assessed by the dispute resolution body
- require that the dispute resolution body publish a notice outlining parties to the dispute and subject of the dispute, the access determination, initial opening capital base (if applicable) and any relevant financial calculations, in addition to information and expert reports provided to the dispute resolution body during the course of the dispute - subject to confidentiality provisions
- enable parties to request that the dispute resolution body join them to an existing dispute, and include the criteria for the dispute resolution body to accept or reject such a request, and a process for parties to join an existing dispute.

These recommendations collectively enhance the efficiency and effectiveness of the dispute resolution framework for scheme pipelines.

This chapter discusses the current framework for the resolution of access disputes on scheme pipelines under Chapter 6 of the NGL and Part 12 of the NGR. The economic

regulation framework for pipelines under the NGL and NGR is a negotiate-arbitrate regime. As such, an efficient and effective dispute resolution framework is integral in providing a credible threat to stakeholders to engage in successful access negotiations.

To date, there have not been any disputes under Chapter 6 of the NGL. This outcome could be explained by one or more of the following:

- for access term negotiations on full regulation pipelines, the access arrangement has been effective as a fall-back option
- the dispute resolution framework under the NGL and the NGR has provided a credible threat to service providers to engage in meaningful access negotiations
- the dispute resolution framework under the NGL and the NGR has been perceived as ineffective.

The chapter discusses key issues that have been raised by stakeholders, and draws on other third party access regimes.⁴⁷⁶

The Commission's recommendations on dispute resolution preserve the balance between:

- the role of arbitration as a backstop and a credible threat for service providers to engage in meaningful negotiations with users and prospective users, and for full regulation pipeline service providers to propose fair access arrangements to the regulators
- addressing stakeholder perceptions that the arbitration process is ineffective and inefficient.

9.1 Current framework

Section 2 of the NGL defines the dispute resolution body for scheme pipelines as the AER. Under the *National Gas Access (WA) Act 2009* (NGL (WA)), the Western Australian Energy Disputes Arbitrator (EDA) is the dispute resolution body for Western Australian scheme pipelines.⁴⁷⁷

Chapter 6 of the NGL sets out the dispute resolution process for scheme pipelines as follows:⁴⁷⁸

- the prospective user or service provider notifies the dispute resolution body of an access dispute
- the dispute resolution body informs the other party of the access dispute
- the dispute resolution body can terminate the dispute, or otherwise must make a determination on access in writing with clearly stated reasons⁴⁷⁹

⁴⁷⁶ These include access regimes that apply to the National Broadband Network, Australian Rail Track Corporation, New South Wales rail, electricity networks and non-scheme gas pipelines.

⁴⁷⁷ Section 9 of Schedule 1 to the *National Gas Access (WA) Act 2009*.

⁴⁷⁸ Sections 181 - 207 of the NGL.

⁴⁷⁹ Under s. 186 of the NGL, the dispute resolution body may terminate an access dispute in accordance with specified circumstances.

- the dispute resolution body may require the parties to mediate, conciliate or engage in another alternative dispute resolution process
- the dispute resolution body must, in making an access determination, give effect to the access arrangement that applies to the services of the access dispute pipeline
- each party bears its own costs in a dispute hearing.

This chapter focuses on the following aspects of the arbitration regime as contained in the NGL:

- section 181 defines the trigger for the dispute resolution process
- section 186 provides grounds for a dispute resolution body to terminate an access dispute
- section 189 provides that a full access arrangement apply in a dispute
- section 195 sets out that parties to an access dispute for which an access determination is made must comply with the access determination
- section 199(1)(e) grants the dispute resolution body the right to refer any matter to an independent expert
- section 198(2) states that the dispute resolution body can set timeframes for the dispute resolution process
- section 206(3)(d) allows the dispute resolution body to consider the nature and complexity of a dispute
- section 200 sets out the powers of the dispute resolution body in relation to disclosure of specified information, and s. 205 addresses the confidentiality of material presented in a dispute
- sections 209 and 210 outline how a dispute resolution body can hold joint dispute resolution hearings.

Part 12 of the NGR sets out additional requirements for the resolution of certain access disputes between a scheme pipeline service provider and user or prospective user conducted under Chapter 6 of the NGL.

Part 12 of the NGR details particular provisions for the arbitration process in a limited number of specific instances:

- if an access dispute arises as a consequence of a refusal of access on safety grounds⁴⁸⁰
- if an access dispute raises the question of an expansion or funding of an expansion, or an extension.⁴⁸¹

Part 12 of the NGR does not contain specific provisions on arbitration processes in regard to other instances where a dispute may arise.

⁴⁸⁰ Rule 115 of the NGR.

⁴⁸¹ Rules 117 - 119 of the NGR.

The NGL provides that the procedural parts and review provisions of the commercial arbitration act for each jurisdiction apply to rule disputes under the NGR in that jurisdiction.⁴⁸² However, it is the Commission's view that this does not apply to disputes under Chapter 6 of the NGL (including Part 12 of the NGR).⁴⁸³ Reviews of access determinations under the dispute resolution framework of Chapter 6 of the NGL and Part 12 of the NGR are through the *Administrative Decisions Judicial Review Act 1977* (Cth) and the Supreme Court of Western Australia (as relevant).

9.1.1 Key differences between current arbitration frameworks for scheme pipelines and non-scheme pipelines

Chapter 6A of the NGL outlines the dispute resolution process for non-scheme pipelines.⁴⁸⁴ Part 23 of the NGR includes information disclosure requirements, and sets out the negotiation and arbitration processes for access to non-scheme pipelines.⁴⁸⁵

The objective of Part 23 is to facilitate access to pipeline services on non-scheme pipelines on reasonable terms, which is taken to mean at prices and on other terms and conditions that reflect the outcomes of a workably competitive market.⁴⁸⁶

To support this, Part 23 creates a positive obligation to negotiate in good faith from the moment access is sought. In addition, provisions under this part provide detailed processes for access requests and negotiations prior to dispute resolution.

Table 9.1 summarises the key differences between the current arbitration frameworks for scheme and non-scheme pipelines.⁴⁸⁷

⁴⁸² Rule disputes are disputes the resolution of which is provided for under the NGR. Refer to s. 2 and Part 5A of Chapter 8 of the NGL.

⁴⁸³ See section 9.2 for further discussion on this aspect of the framework.

⁴⁸⁴ Refer to Appendix B for a full description of the main features of Chapter 6A and Part 23.

⁴⁸⁵ Non-scheme pipelines include uncovered pipelines, which include greenfield pipelines that have been provided with an exemption from coverage. Refer to Appendix D.

⁴⁸⁶ Rule 546(1) of the NGR.

⁴⁸⁷ The table provides a high level summary. It is not an exhaustive list of all features of the frameworks. Refer to ss. 23, 181, 186, 200, 209 and 216H of the NGL and rules 546, 569 and 581 of the NGR.

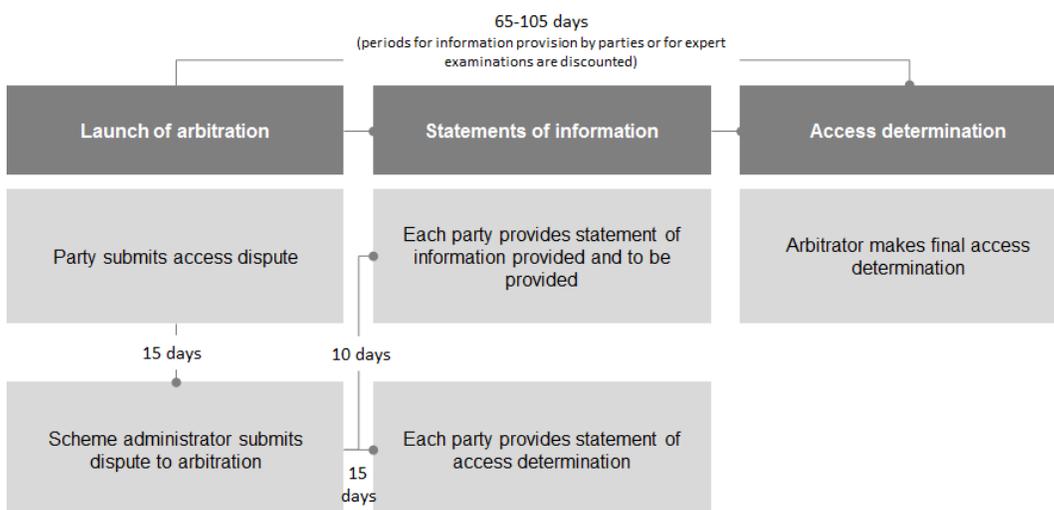
Table 9.1 Key differences between scheme and non-scheme pipeline arbitration frameworks

	Current scheme pipeline arbitration framework: Chapter 6 of the NGL and Part 12 of the NGR	Non-scheme pipeline arbitration framework: Chapter 6A of the NGL and Part 23 of the NGR
Trigger for the dispute resolution process	Dispute resolution is triggered if a prospective user or user is unable to agree with a service provider about one or more aspects of access to a pipeline service provided or to be provided by means of a scheme pipeline. Dispute resolution body may terminate an access dispute if it considers that the party who notified the access dispute had, but did not avail itself of, an opportunity to engage in negotiations in good faith with the other party.	Dispute resolution is triggered if a prospective user or user and a service provider cannot agree about one or more aspects of access to a pipeline service after a request has been made in accordance with the rules. Arbitrator may determine not to proceed with an arbitration if it considers that the party who notified the access dispute did not negotiate in good faith.
Dispute resolution body	AER for states and territories other than Western Australia, Energy Disputes Arbitrator for Western Australia.	In consultation with disputing parties, the scheme administrator (AER, ERA for Western Australia) appoints arbitrator from pool of commercial arbitrators that is set up and maintained by scheme administrator.
Timeframes for the dispute resolution process	Not specified. However, s. 198(1)(b) of the NGL requires that the dispute resolution body act as speedily as a proper consideration of the dispute allows.	Up to 65 business days or up to 105 business days upon agreement of parties - periods for provision of information by parties or for experts to consider matters are discounted.
Transparency	Not specified.	After the arbitration has concluded, scheme administrator (AER/ERA) publishes pipeline and services that were subject of the arbitration, parties to the arbitration (upon the consent of the prospective user), name of the arbitrator, duration of arbitration proceedings, whether the prospective user has wished to enter into an access contract in accordance with the final access determination, and asset valuation method and values (where applicable).
Joint dispute resolution proceedings	Dispute resolution body may hold joint dispute hearings.	Scheme administrator may join a party to a dispute if it requires it to do something.

	Current scheme pipeline arbitration framework: Chapter 6 of the NGL and Part 12 of the NGR	Non-scheme pipeline arbitration framework: Chapter 6A of the NGL and Part 23 of the NGR
Reference framework for the dispute resolution body	Full access arrangement is reference framework for dispute resolution on tariff and non-tariff terms and conditions on a full regulation pipeline and limited access arrangement for a light regulation pipeline (where it exists). Not specified for other instances.	Reference framework covers objective, a set of pricing principles (cost reflective prices and reasonable cost allocation), operational and technical requirements and business interests of the parties.

The access regime for non-scheme pipelines prescribes timeframes for the arbitration process. Figure 9.1 summarises the key steps and associated timeframes.

Figure 9.1 Overview of arbitration process timeframes under Part 23 of the NGR



Based on submissions to the issues paper, in addition to discussions with key stakeholders, the Commission identified key issues in the arbitration framework for scheme pipelines under Chapter 6 of the NGL and Part 12 of the NGR.⁴⁸⁸ The draft report made draft recommendations to address these issues, as they impact the effectiveness and efficiency of the dispute resolution process, in addition to the credibility of the threat of arbitration on scheme pipelines.

⁴⁸⁸ Submissions to the issues paper: EDA, pp. 1-2; ACCC, p. 9; AGL, p. 4; Chemistry Australia, p. 5. Chapter 5 discusses reference services and Chapter 7 discusses capital base valuations, and both are relevant for this chapter.

9.2 Trigger for the dispute resolution process

9.2.1 Summary of draft report findings and draft recommendations

Section 181 of the NGL defines the trigger for arbitration as the inability of parties to agree. The Commission considered that this may create ambiguity and additional specification would be beneficial for users of the dispute resolution framework.

The Commission considered that it would be more appropriate to enable a dispute to be triggered if parties have not agreed within a prescribed timeframe. The Commission also found that guidance on the process for negotiation and agreement between the parties would allow the dispute resolution body to make such a decision more readily. A draft recommendation was made to this effect.

Draft recommendation 27: Amend trigger for dispute resolution process

To expand the negotiation process in the NGR to set out the steps that are to be followed by each party, and assign timeframes for each step. These steps include:

- upon receiving an access request from a prospective user, the pipeline service provider will acknowledge receipt within five business days
- the pipeline service provider will investigate whether access can be provided, and inform the prospective user with evidence if it cannot within 10 business days of receiving the access request
- if the pipeline service provider can provide access, then it will provide the prospective user with an access proposal within 20 business days of receiving the access request
- if the prospective user wishes to seek access based on the access proposal, it must notify the service provider within 15 business days of receiving the access proposal
- if the prospective user wishes to request modifications to the access proposal, it must notify the service provider within 15 business days of receiving the access proposal and the service provider should respond within 15 business days of receiving the access proposal
- if the prospective user does not agree with the service provider's response, then it may trigger dispute resolution.

The Commission's draft recommendation was to redefine the trigger for the dispute resolution process as failure of the parties to agree within the negotiation timeframes (45 business days) in the NGL and NGR. The dispute resolution body will be able to terminate an access dispute if it considers that the notifying party had, but did not avail itself of, an opportunity to engage in negotiations in good faith.

9.2.2 Stakeholder submissions to draft report

ACCC, EDA and user stakeholders generally supported the draft recommendations.⁴⁸⁹ However, APGA considered that there had been no evidence that the dispute resolution

⁴⁸⁹ Submissions to the draft report: ACCC, p. 14; EDA, pp. 1-2;

framework required review, and AGIG considered that some of the draft recommendations would add to the regime's complexity.⁴⁹⁰

More specifically, APGA considered that the fact that dispute resolution had never been triggered might have nothing to do with the trigger in the NGL and NGR, and as such it did not support the draft recommendation on amending the trigger for dispute resolution.⁴⁹¹ AGIG considered that the draft recommended timeframes for access negotiations were too rigid, and that the right of a prospective user to trigger arbitration should have a time limit.⁴⁹² It was also concerned that the absence of a time limit could mean that a pipeline service provider might have multiple access requests on foot at any point in time, each of which may be referred to arbitration at any point in the future by a prospective user. APA considered that the draft recommendation on the dispute resolution trigger was unnecessary and that the draft recommended access negotiation process was unrealistic.⁴⁹³ Similarly, ATCO considered that the proposed timelines were not sufficient for service providers to perform the required due diligence.⁴⁹⁴

9.2.3 Commission analysis

Section 181 of the NGL defines the trigger for arbitration as the inability of parties to agree. However, a trigger such as the inability to agree may raise some ambiguity. While it may be easy to establish that the parties have not agreed, it is another matter to prove that they are unable to agree. An ambiguous trigger for dispute resolution may mean that even where parties are disputing access, it would be difficult to start the dispute resolution process. The consequence would be that this extends the timeframe for negotiations and reduces the credibility of the threat of arbitration, as it minimises the likelihood that dispute resolution would be triggered. This lessens the constraint on market power and increases the probability of inefficient consumer outcomes.

Related to the triggering of a dispute, the NGL gives the dispute resolution body the right to terminate an arbitration if it considers that the party that notified the dispute had, but did not avail itself of, an opportunity to engage in negotiations in good faith with the other party prior to notifying the dispute resolution body of a dispute.

In submissions to the draft report, APA and APGA considered that there was no evidence that creating a clear trigger for the dispute resolution process was necessary.⁴⁹⁵ However, this view does not address the concerns held by other stakeholders. The Commission considers that, as with other recommendations on the dispute resolution framework, the perception of an issue by users and prospective users warrants consideration of that issue and a recommendation where appropriate. In this case, if users and prospective users perceive that they cannot trigger dispute resolution easily, then they are less likely to trigger it even when negotiations fail. As a result, the dispute resolution framework for scheme pipelines becomes less of a credible threat for

⁴⁹⁰ Submissions to the draft report: APGA, p. 3 and pp. 10-12; AGIG, p. 2.

⁴⁹¹ APGA, submission to the draft report, pp. 10-11.

⁴⁹² AGIG, submission to the draft report, pp. 2-3.

⁴⁹³ APA, submission to the draft report, p. 30.

⁴⁹⁴ ATCO, submission to the draft report, p. 8.

⁴⁹⁵ Submissions to the draft report: APA, p. 30; APGA, pp. 10-11.

service providers to engage in effective negotiations. This is not a good outcome and should be addressed.

In addition to an ambiguous trigger, the NGR do not prescribe a negotiation process for access on scheme pipelines. They only specify procedural requirements for requesting access and providing or denying access to scheme pipelines.⁴⁹⁶ The NGR provide a timeframe of 20 business days for the service provider to respond to an access request. The dispute resolution body has no express power to order the other party or parties to negotiate. If the service provider does not engage in negotiations, then to achieve engagement, the user or prospective user may have no option but to incur the cost of commencing arbitration and locking itself into an arbitration process. However, the dispute resolution body may require the parties to mediate before arbitration.⁴⁹⁷

In comparison, the negotiation framework under the National Broadband Network (NBN) special access undertaking and the instruments incorporated into it provides that any dispute (in relation to the agreement, including access) must first be referred for negotiation or resolution between the parties within 10 business days (or such other time as agreed). Only if negotiation fails in that time period can the dispute be referred to dispute resolution.⁴⁹⁸

Similarly, the Australian Rail Track Corporation (ARTC) access undertaking provides a detailed negotiation process for obtaining access. The process includes further negotiation to resolve the dispute prior to referring it to mediation or arbitration as summarised in Box 9.2.

⁴⁹⁶ Rule 112 of the NGR.

⁴⁹⁷ Section 185 of the NGL.

⁴⁹⁸ *Wholesale Broadband Agreement*, cl. G2, 1(b).

Box 9.2 Access negotiation under ARTC access undertaking

The process for negotiating access with ARTC is:⁴⁹⁹

- upon receiving an access application, the ARTC will acknowledge receipt within five business days
- ARTC will use reasonable efforts to provide an indicative access proposal to the access applicant within 30 business days after the acknowledgement
- applicant may refer the matter to the arbitrator for determination 30 business days following the acknowledgment if the applicant considers that ARTC is not making reasonable progress in the preparation of the proposal
- if the applicant intends to progress its access application under the negotiation process on the basis of the arrangements outlined in the indicative access proposal, the applicant will notify ARTC of its intention to do so within 30 business days of receiving the proposal
- alternatively, the applicant has 30 business days to notify ARTC of any concerns with the proposal that would make it inappropriate to continue with the negotiation process
- ARTC will respond to the applicant's concerns within 30 business days
- within 30 business days of the applicant's receipt of ARTC's response, the applicant will notify ARTC that it is satisfied with the response and intends to proceed with negotiations, or that the applicant is commencing the dispute resolution process
- if the applicant progresses to negotiations, the negotiation period ceases upon any of the following events:
 - when an access agreement is reached between the parties
 - on notification by the applicant that it no longer wishes to proceed
 - the expiration of a three month period
 - negotiations are not progressing in good faith
 - where the application no longer satisfies the prudential requirements of the undertaking.

The Commission considers that the NGR should lay out a clearer access negotiation process with binding timeframes on both parties. Some service providers considered that the Commission's proposed draft access negotiation timeframes were rigid and unrealistic.⁵⁰⁰ In response, the Commission has consulted with these stakeholders and refined the timeframes in line with their input. The overall access negotiation timeframe is 55 days in the final recommendation. Either party can also trigger a dispute at any point during the access negotiation process. The dispute resolution body will be able to

⁴⁹⁹ ARTC Access Undertaking, cl. 3.7-3.10

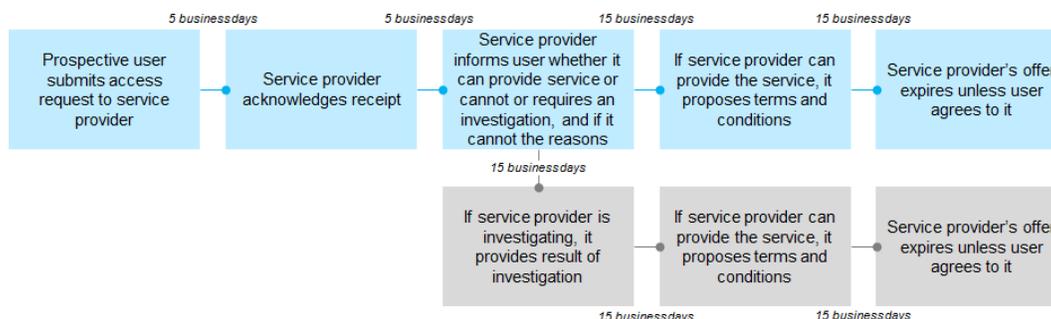
⁵⁰⁰ Submissions to the draft report: AGIG, pp. 2-3.; APA, p. 30.

terminate an access dispute if it considers that the notifying party had, but did not avail itself of, an opportunity to engage in negotiations in good faith.

The Commission considers the recommended arrangements balance the needs of the parties in a dispute and provide significantly clearer guidance on the negotiation process and the events leading to the triggering of a dispute. Greater understanding of these aspects will enable parties to make informed decisions on their negotiations.

Figure 9.2 summarises the Commission's recommended access negotiation process.

Figure 9.2 Recommended access negotiation process



9.2.4 Final recommendation

Recommendation 27: Clarify the negotiation process and the trigger for the dispute resolution process

To expand the negotiation process in the NGR, set out the steps that are to be followed by each party, and assign timeframes for each step:

- prospective user submits access request to service provider
- service provider acknowledges receipt of access request within five business days of the prospective user submitting it
- service provider informs prospective user within five business days of acknowledging receipt of the access request whether:
 - it can provide the service
 - it cannot provide the service, and the reasons why not
 - it requires an investigation in order to determine whether it can provide the service
- if the service provider can provide the service, it proposes terms and conditions within fifteen business days of notifying the prospective user that it can provide the service
- if the service provider requires an investigation, it provides the results of the investigation within fifteen business days of notifying the prospective user that it requires to investigate
- if the service provider finds that it can provide the requested service as a result of the investigation, it proposes terms and conditions within fifteen business days of

notifying the prospective user that it can provide the service as a result of the investigation

- prospective user has to confirm acceptance of the service provider's terms and conditions within fifteen business days of the proposal.

Either party can trigger a dispute at any point during the access negotiation process.

This recommendation will be effected through rule 112 of the NGR and s. 181 of the NGL.

9.3 Dispute resolution body and role of dispute resolution expert

9.3.1 Summary of draft report findings and draft recommendations

Another significant issue raised by stakeholders was the identity of the dispute resolution body, and whether it should be:⁵⁰¹

- the AER or Energy Disputes Arbitrator for Western Australia, as under the current framework
- a commercial arbitrator, as under Chapter 6A of the NGL and Part 23 of the NGR.

Some stakeholders were in favour of retaining the current identity of the dispute resolution body because it would, in their view:⁵⁰²

- contribute to lower arbitration costs
- provide consistency in arbitration determinations
- enhance the dispute resolution body's accountability for precedent arbitration proceedings.

In the draft report, the Commission stated that maintaining the current identity of the dispute resolution body would minimise costs, achieve consistency of outcomes and enhance accountability for determinations. The Commission concluded that the current arrangements on the identity of the dispute resolution body were appropriate and should remain in place.

Relatedly, the NGL allows for the assignment of independent experts to the dispute resolution body. Section 199(1)(e) of the NGL states that the dispute resolution body may refer any matter to an independent expert and accept the expert's report as evidence. Part 12 of the NGR sets out provisions for the appointment of a safety expert.⁵⁰³

It appeared to the Commission that some confusion on the role of the expert could arise under the current framework. The Commission concluded that the role of the dispute resolution expert in the current framework could benefit from additional guidance and made a draft recommendation aiming to resolve the issue.

⁵⁰¹ This issue was raised by participants at the AEMC stakeholder workshop on 14 December 2017.

⁵⁰² For example, the EUAA made this comment at the AEMC stakeholder workshop on 14 December 2017.

⁵⁰³ Rules 115 and 116 of the NGR.

Draft recommendation 28: Clarify the role of the dispute resolution expert

To clarify the role of the dispute resolution expert. The dispute resolution framework for scheme pipelines should provide additional guidance on the role of the dispute resolution expert in providing advice on dispute resolution, energy industry, gas industry and matters relevant to the particular dispute. The framework should also set out the process for appointing the dispute resolution expert and using the evidence or reports that the expert provides.

9.3.2 Stakeholder submissions to draft report

EUAA considered that disputing parties should not be able to influence experts. On the other hand, APA considered that disputing parties should be able to comment on the accuracy of any expert advice that is provided in the course of a dispute.⁵⁰⁴ No submissions were received in relation to the identity of the dispute resolution body.

9.3.3 Commission analysis

The Commission examined the issue of the identity of the dispute resolution body, and whether it should be:⁵⁰⁵

- the AER or Energy Disputes Arbitrator for Western Australia, as under the current framework
- a commercial arbitrator, as under Chapter 6A of the NGL and Part 23 of the NGR.

When this issue was considered in designing the code, the regulator was given the role of dispute resolution body.⁵⁰⁶ In doing so, both the regulator and a commercial arbitrator were considered to satisfy the criteria of independence, industry knowledge and knowledge of legislation. However, only the regulator was considered to possess adequate knowledge of any applicable access arrangement and relevant precedents. Moreover, the regulator was considered better placed to take into account issues of public interest, and to enforce arbitration outcomes. In addition, the regulator was considered to have a broad and ongoing accountability as opposed to a commercial arbitrator. The Commission considers that these points apply equally to both the AER and the Energy Disputes Arbitrator for Western Australia. Even though it is not the regulator, the Energy Disputes Arbitrator provides a single point of decision making and accountability, in addition to consideration of public interest and knowledge of precedents.

Some stakeholders commented in favour of retaining the current identity of the dispute resolution body because it would, in their view:⁵⁰⁷

⁵⁰⁴ Submissions to the draft report: EUAA, p. 8; APA, p. 30.

⁵⁰⁵ This issue was raised by participants at the AEMC stakeholder workshop on 14 December 2017.

⁵⁰⁶ Note that in the context of the code, "regulator" referred to state and territory based regulators, in addition to a national regulator for transmission pipelines. Gas Reform Task Force, *Information paper to accompany the exposure draft of the national third party access code for natural gas pipeline systems*, 8 August 1996.

⁵⁰⁷ For example, the EUAA made this comment at the AEMC stakeholder workshop on 14 December 2017.

- contribute to lower arbitration costs
- provide consistency in arbitration determinations and accountability for any precedent arbitration proceedings.

On balance, the Commission considers that maintaining the current identity of the dispute resolution body minimises costs, achieves consistency of outcomes and enhances accountability for determinations. This is consistent with the long term interests of pipeline users and gas consumers.

In addition, the NGL allows for the dispute resolution body to refer any matter to an independent expert. Section 199(1)(e) of the NGL states that the dispute resolution body may refer any matter to an independent expert and accept the expert's report as evidence. While the NGL establishes a broad scope for experts, Part 12 of the NGR only sets out provisions for the appointment of a safety expert.⁵⁰⁸

While Part 12 of the NGR does not limit the operation of the NGL, there is likely to be some uncertainty arising from the different provisions. The draft report commented that providing additional guidance on the dispute resolution expert would clarify the expert's role for the benefit of service providers and users.

The Commission considers that the most appropriate action to achieve greater clarity on experts for disputes is to amend the regulatory framework. The NGL should refer to experts in arbitration, energy or the gas industry.⁵⁰⁹ This will guide the dispute resolution body in appointing any relevant expert to provide technical assistance as required. This would enable an expert to complement the dispute resolution body's resources where needed due to the complexity of the subject of the dispute or time constraints. In turn, this would:

- enhance the efficiency of dispute resolution as an effective backstop to ensure successful negotiations
- improve dispute resolution outcomes.

In response to the draft report, EUAA considered that disputing parties should not influence experts. In contrast, APA considered that disputing parties should be able to comment on any expert advice.⁵¹⁰

The Commission considers that it is important that the expert have a clear obligation to the dispute resolution body only. The expert should not be under the direction of either disputing party. The Commission has also recommended that any expert reports be published once the particular dispute resolution process has concluded. This is consistent with other transparency measures included in the scheme pipeline dispute resolution framework.

The Commission recommends that the independent expert:

- be appointed on terms and conditions determined by the dispute resolution body

⁵⁰⁸ Rules 115 and 116 of the NGR.

⁵⁰⁹ Section 199(1)(e) of the NGL provides for the dispute resolution body to refer any matter to an independent expert and to accept the expert's report as evidence.

⁵¹⁰ Submissions to the draft report: EUAA, p. 8; APA, p. 30.

- report to the dispute resolution body in accordance with its requirements.

The Commission's recommendation intends to limit the role of the expert to providing expert advice to the dispute resolution body, rather than substituting any of its dispute resolution functions.

The Commission considers that these recommended changes to the arrangements regarding experts for disputes will aid all parties in understanding the role and scope of experts that may be employed. The measures should also support the dispute resolution bodies to employ experts that are able to aid in the timely resolution of a dispute, which will benefit service providers and users in successfully negotiating the provision of pipeline services.

9.3.4 Final recommendation

Recommendation 28: Clarify the role of the dispute resolution expert

Provide additional guidance on the role of the dispute resolution expert in providing advice on dispute resolution, energy industry, gas industry and matters relevant to the particular dispute:

- the expert must have knowledge and expertise that is relevant to the dispute
- the expert must not have any material direct or indirect interest or association that compromises, or is likely to compromise, the impartiality of the expert in relation to relevant disputes.

Set out the process for appointing the dispute resolution expert and using the evidence or reports that the expert provides as follows:

- the expert will be appointed on terms and conditions determined by the dispute resolution body
- the expert must report to the dispute resolution body
- the dispute resolution body must publish the expert's report.

The Commission's recommendation is reflected in the drafting instructions for the NGL.

9.4 Reference framework for the dispute resolution body

9.4.1 Summary of draft report findings and draft recommendations

While the NGL does not prevent contracts for pipeline services from differing from the access arrangement, an access arrangement is a reference for the decisions made by the dispute resolution body. However, neither the NGL nor the NGR lay out an overarching reference framework for the dispute resolution body that would apply in cases where there is no applicable access arrangement or the access arrangement is less relevant (for example, the dispute is not around access terms or conditions but around a requirement to expand the pipeline).

The Commission considered that the introduction of a reference framework for the dispute resolution body to make access determinations under Chapter 6 of the NGL and Part 12 of the NGR would be beneficial and achieve the following:

- guide the drafting of the access determination

- clarify to stakeholders the bases of arbitration outcomes
- in the event that the dispute resolution body's decision is subject to judicial review, clarify the grounds for review of an access determination.

Consequently, the Commission made a draft recommendation that the dispute resolution framework under the NGL and NGR lay out a clear reference framework for decisions made by the dispute resolution body.

Draft recommendation 29: Establish a reference framework for the dispute resolution body

The Commission's draft recommendation was that the dispute resolution framework under Chapter 6 of the NGL and Part 12 of the NGR include a decision framework for dispute resolution on scheme pipelines that access determinations would be made with reference to. This framework would be in line with that under Part 15C of the NGR and include the following:

- national gas objective
- revenue and pricing principles
- access arrangements for full regulation pipelines
- regulatory determinations for full regulation and light regulation pipelines
- building block methodology to calculate total revenue for light regulation pipelines (where applicable)
- other criteria such as efficiency of process, and preservation of relationship between the parties.

9.4.2 Stakeholder submissions to draft report

Central Petroleum and EUAA considered that the dispute resolution framework should prescribe a capital base valuation methodology.⁵¹¹ They considered that the dispute resolution body and market participants need to have certainty as to the specific methodology that would be used to determine asset values so that they can assess the appropriateness of prevailing pipeline charges and merits associated with arbitration.

No other stakeholders commented on the draft recommendation to provide an overarching decision making framework for the dispute resolution bodies.

9.4.3 Commission analysis

Section 322 of the NGL states that the NGL does not prevent a service provider from entering into an agreement with a user or a prospective user about access to a pipeline service provided by means of a scheme pipeline that is different from an applicable access arrangement that applies to that pipeline service. However, s. 189 of the NGL stipulates that in making an access determination, a dispute resolution body must give effect to an applicable access arrangement.⁵¹² This provision applies to both limited

⁵¹¹ Submissions to the draft report: Central Petroleum, p. 2; EUAA, p. 8.

⁵¹² Subject to s. 135 of the NGL, under which the service provider is required to comply with the queuing requirements of an applicable access arrangement.

access arrangements for light regulation pipelines and to full access arrangements for full regulation pipelines.⁵¹³ Therefore, an applicable access arrangement provides a reference for the decisions of the dispute resolution body under the NGL.⁵¹⁴

However, neither the NGL nor the NGR lay out an overarching reference framework for the dispute resolution body to make decisions in cases where there is no applicable access arrangement or the access arrangement is less relevant (for example, if the dispute is not in regard to access terms or conditions).

The Commission considers that this makes the basis of the decisions of the dispute resolution body unclear in these circumstances. As a result, this may increase the uncertainty of arbitration outcomes, which may in turn reduce the credibility of the threat of arbitration.

While the Commission expects that the NGO and the revenue and pricing principles would guide arbitrations on full and light regulation pipelines, this is not specified in the NGL or NGR.

However, the NGR do set out general principles that guide the resolution of market disputes under Part 15C of the NGR, which are to:⁵¹⁵

- be guided by the NGO
- take account of the skills required to resolve the dispute
- observe the rules of natural justice
- be simple, quick and inexpensive
- preserve or enhance the relationship between parties to the dispute
- place emphasis on conflict avoidance
- encourage resolution of disputes without formal legal representation or reliance on legal procedures.

The NER also set out a similar set of general principles that are used to guide the dispute resolution process.⁵¹⁶

Similarly, the ARTC access undertaking lays out general principles for the arbitrator to take into account, which include:⁵¹⁷

- principles, methodologies and provisions in the undertaking
- objectives and principles of Part IIIA of the Competition and Consumer Act
- ARTC's legitimate business interests and investment in the network
- costs of providing access

⁵¹³ See definition of 'applicable access arrangement' in s. 2 of the NGL.

⁵¹⁴ The Commission also considers that s. 189 of the NGL may be expanded so that the access arrangement applies to provide access as soon as a dispute is triggered, and this is discussed further below.

⁵¹⁵ Rule 135FA of the NGR.

⁵¹⁶ Clause 8.2.1(e) of the NER.

⁵¹⁷ *ARTC Access Undertaking*, cl.3.12.4(b)(vi).

- operational and technical requirements
- economically efficient operation.

For light regulation pipelines, and because there is no full access arrangement, the Commission considers that the dispute resolution body requires clear guidance for tariff disputes in relation to the following:

- calculation of an initial capital base, if the light regulation pipeline does not have an initial capital base determination
- how to roll forward the capital base
- application of the building block methodology.

Relevant to points raised by Central Petroleum and the EUAA, Chapter 7 of this report recommends amendments to the NGR so that the methodology in rule 77 applies to the calculation of the initial capital base and the rolling forward of the capital base for light regulation pipelines. Chapter 7 also recommends that the regulators determine the initial opening capital bases of all light regulation pipelines that do not have an initial opening capital base valuation.

In addition to this specific guidance, the Commission considers that the introduction of a general reference framework for the dispute resolution body to make access determinations under Chapter 6 of the NGL and Part 12 of the NGR would be beneficial to the dispute resolution body as well as the parties to the dispute. Specifically, a decision making framework would achieve the following:

- guide the drafting of the access determination
- clarify to the disputing parties as well as interested stakeholders the bases of arbitration outcomes
- in the event that the dispute resolution body's decision is subject to judicial review, clarify the grounds for seeking review of an access determination.

Therefore, the Commission recommends that the dispute resolution framework under the NGL and NGR include a clear reference framework for decisions made by the dispute resolution body. The framework should refer to the NGL, revenue and pricing principles, applicable access arrangement, initial opening capital base determination, in addition to previous access arrangements, access determinations and pre-existing contractual rights on the same pipeline. The reference framework would also include guidance on the tariff setting methodology for a light regulation pipeline. These changes would enhance the predictability of arbitration outcomes and the threat of arbitration in encouraging successful negotiations.

9.4.4 Final recommendation

Recommendation 29: Establish a reference framework for the dispute resolution body

Include a decision framework for dispute resolution on scheme pipelines that access determinations would be made with reference to. This framework would include the following:

- national gas objective

- revenue and pricing principles
- applicable access arrangement
- previous access arrangements
- previous access determinations
- pre-existing contractual rights
- applicable provisions from Part 9 to calculate total revenue and tariffs for light regulation pipelines (where applicable).

The Commission's recommendation is reflected in the drafting instructions for the NGL.

9.5 Timeframe for the dispute resolution process

9.5.1 Summary of draft report findings and draft recommendations

The draft report noted that Chapter 6 of the NGL does not specify any timeframes for the arbitration process although it does require the dispute resolution body to act as speedily as a proper consideration of the dispute allows.⁵¹⁸ In addition, Part 12 of the NGR is silent on timeframes.

In the draft report, the Commission noted that timeframes for arbitration on a scheme pipeline will vary depending on the nature of the pipeline and the dispute. For this reason, it would be appropriate for the dispute resolution body to have the flexibility to set timeframes to resolve a dispute based on its complexity.

The draft report listed the following factors that could influence the length of the arbitration process on a scheme pipeline:

- the subject of the dispute, for example, a disputed non-tariff term or condition may be expected to take relatively less time and a disputed expansion relatively more
- the scope of the dispute, for example, traditional forward haul services may be expected to be resolved faster than other types of pipeline services
- whether the pipeline is full regulation or light regulation, as a full access arrangement on a full regulation pipeline is expected to facilitate and expedite the arbitration process.⁵¹⁹

The Commission considered that the factors listed above could be appropriate to take into account in setting a timeframe for a dispute resolution process. Therefore, the Commission recommended the introduction of a fast-tracked dispute resolution under circumstances in which it is suitable based on an assessment of a set of appropriate factors. This was intended to address the perception that arbitration is slow, without compromising the arbitration outcome.

Draft recommendation 30: Introduce a fast-tracked dispute resolution process

⁵¹⁸ Section 198(1)(b) of the NGL.

⁵¹⁹ For a full regulation pipeline, the usefulness of the identified reference services would play a key role. This is covered in Chapter 5.

The Commission's draft recommendation was that dispute resolution framework under Chapter 6 of the NGL and Part 12 of the NGR set out that a dispute could be resolved under a fast-tracked dispute resolution process if it meets a set of factors that are assessed by the dispute resolution body.

The Commission's draft recommendation was that the fast-tracked dispute resolution process resolve a dispute within 50 business days. The dispute resolution framework under Chapter 6 of the NGL and Part 12 of the NGR would set out the steps and timeframes for the fast-tracked dispute resolution process.

9.5.2 Stakeholder submissions to draft report

A number of stakeholders responded to the draft recommendation on fast-tracked dispute resolution. The ACCC did not support the draft recommendation: it considered that the 50 day time limit was too short and that the classification factors might be difficult to meet.⁵²⁰ Similarly, the AER considered that the timeframe for fast-tracked dispute resolution should be at least 180 days with "stop the clock" provisions, and that the factors to consider in classifying a dispute for fast-tracked resolution should be set in a guideline.⁵²¹ The MEU considered that fast-tracked dispute resolution might disadvantage users, as information asymmetry would allow the service provider to respond faster than a prospective user.⁵²²

In contrast, the EDA supported the fast-tracked dispute resolution process, although it considered that at least one disputing party should approve a dispute resolution proceeding being fast tracked by the dispute resolution body.⁵²³

9.5.3 Commission analysis

The timeframe for the dispute resolution process has been repeatedly raised by stakeholders as a concern.⁵²⁴ Although there have not been any arbitrations lodged under Chapter 6 to date, stakeholders perceive the arbitration process as slow. This may deter parties from triggering dispute resolution, and reduces its credibility as a threat for stakeholders to engage in successful negotiations.

Chapter 6 of the NGL does not specify any timeframes for the arbitration process although it does require the dispute resolution body to act as speedily as a proper consideration of the dispute allows.⁵²⁵ This provides considerable discretion to the dispute resolution body to determine timeframes for each dispute.

The NGL, NEL and the Competition and Consumer Act that applies to ARTC access undertakings, state that the dispute resolution body must act as speedily as proper consideration of the dispute allows.⁵²⁶

520 ACCC, submission to the draft report, p. 14.

521 AER, submission to the draft report, p. 9.

522 MEU, submission to the draft report, p. 21.

523 EDA, submission to the draft report, pp. 1-2.

524 AGL, submission to the issues paper, p. 4.

525 Section 198(1)(b) of the NGL.

526 National Electricity Law, s. 139(b); Competition and Consumer Act, s. 44ZF(1)(b).

While not overly detailed, the code prescribed an overall timeframe for the arbitration process and assigned deadlines to particular steps in that process:⁵²⁷

“6.11 The Arbitrator must provide a final decision under section 6.7 within three months of requiring parties to make submissions under section 6.4.

The Arbitrator must also ensure that there is a period of at least 14 days:

(a) between requiring parties to make submissions under section 6.4 and the last day for such submissions specified by the Arbitrator; and

(b) between providing a draft decision to the parties under section 6.9(b) and the last day for submissions on the draft decision specified by the Arbitrator.

In all other respects the timing for the taking of each of the steps set out in section 6.9 is a matter for the Arbitrator to determine.

6.12 The Arbitrator may increase the period of three months specified in section 6.11 by periods of up to one month on one or more occasions provided it provides the parties (and each person who has made a written submission to the Arbitrator) with a notice of the decision to increase the period.”

Timeframes for arbitration on a scheme pipeline will vary depending on the nature of the pipeline and the dispute. The Commission notes that the NGL allows for the dispute resolution body to have the flexibility to set the timeframe to resolve a dispute based on its complexity. The dispute resolution body would then set a measured timeframe that successfully balances the speed of the resolution of the dispute with the accuracy of the outcome, making the process fit for purpose. This enhances the effectiveness of the dispute resolution mechanism as a constraint to market power.

As discussed above, the Commission considers that the factors that could influence the length of the arbitration process on a scheme pipeline include:

- the subject of the dispute
- the scope of the dispute
- whether the pipeline is full regulation or light regulation.⁵²⁸

The Commission considered that the factors listed above could be appropriate to take into account in setting a timeframe for a dispute resolution process. The draft recommendation was to allow for the dispute resolution body to follow a fast-tracked process of 50 business days based on a set of criteria along the above factors. These criteria should be included in the NGR in order to:

- promote consistency in dispute resolution timeframes across the AER and the Energy Disputes Arbitrator of Western Australia
- provide a clear signal to stakeholders of the expected timeframes for the resolution of some disputes.

⁵²⁷ Sections 6.11 and 6.12 of the code.

⁵²⁸ For a full regulation pipeline, the usefulness of the identified reference services would play a key role. This is covered in Chapter 5.

In examining this further, the Commission considers that the dispute resolution body should have the discretion to select a fast-tracked process and provide its reasons for making its selection. If the dispute resolution body considers that a dispute cannot be resolved within the shorter timeframe, then it should retain the discretion not to propose it or not to approve if it is proposed by a disputing party.

The length of time for a fast-tracked dispute resolution process has been discussed in some submissions. The AER suggested 180 days with "stop the clock" provisions. The Commission does not consider that such a long time frame is appropriate. It would reduce the effectiveness of a fast-tracked process in addressing user perceptions that the dispute resolution process is too long even for simple disputes. However, the Commission has refined the draft fast-tracked process and introduced stop the clock provisions to provide additional flexibility to parties and address concerns about the timeframe.

In addition, the Commission has refined the draft recommendation such that the final recommendation requires the user to approve the use of the fast-tracked process if it is proposed by the service provider or the dispute resolution body. This also addresses the concern expressed by the MEU that a user or prospective user may find the fast-tracked process disadvantageous.

Therefore, the Commission recommends the introduction of a fast-tracked dispute resolution under circumstances in which it is suitable based on an assessment of a set of criteria:

- whether the dispute is on a full regulation pipeline, such that there would be an applicable access arrangement as well as previous regulatory decisions in relation to the pipeline
- whether the dispute concerns a service that is similar to the reference service, such that the applicable access arrangement provides a direct reference
- whether the dispute concerns terms and conditions, such that the applicable access arrangement is relevant, rather than an expansion or extension of the pipeline.

The fast-tracked dispute resolution process is intended to address the perception that arbitration is slow, without compromising the arbitration outcome. The Commission considers that the option of a fast tracked dispute resolution process will act as a deterrent for the other party to delay negotiations, because there is a threat of the triggering of a fast-tracked process for a third party to resolve the dispute. This should improve confidence in the dispute resolution process and enhance its credibility as a threat for successful negotiation.

In addition, defined steps and timeframes for the fast-tracked process will contribute to the speed of the resolution of disputes and in turn enhance the effectiveness of the dispute resolution mechanism. The Commission recommends that the fast-tracked dispute resolution process be as follows:

- the disputing party submits a notice of dispute to the dispute resolution body, and if the disputing party is a prospective user, then it may propose that the dispute be fast-tracked

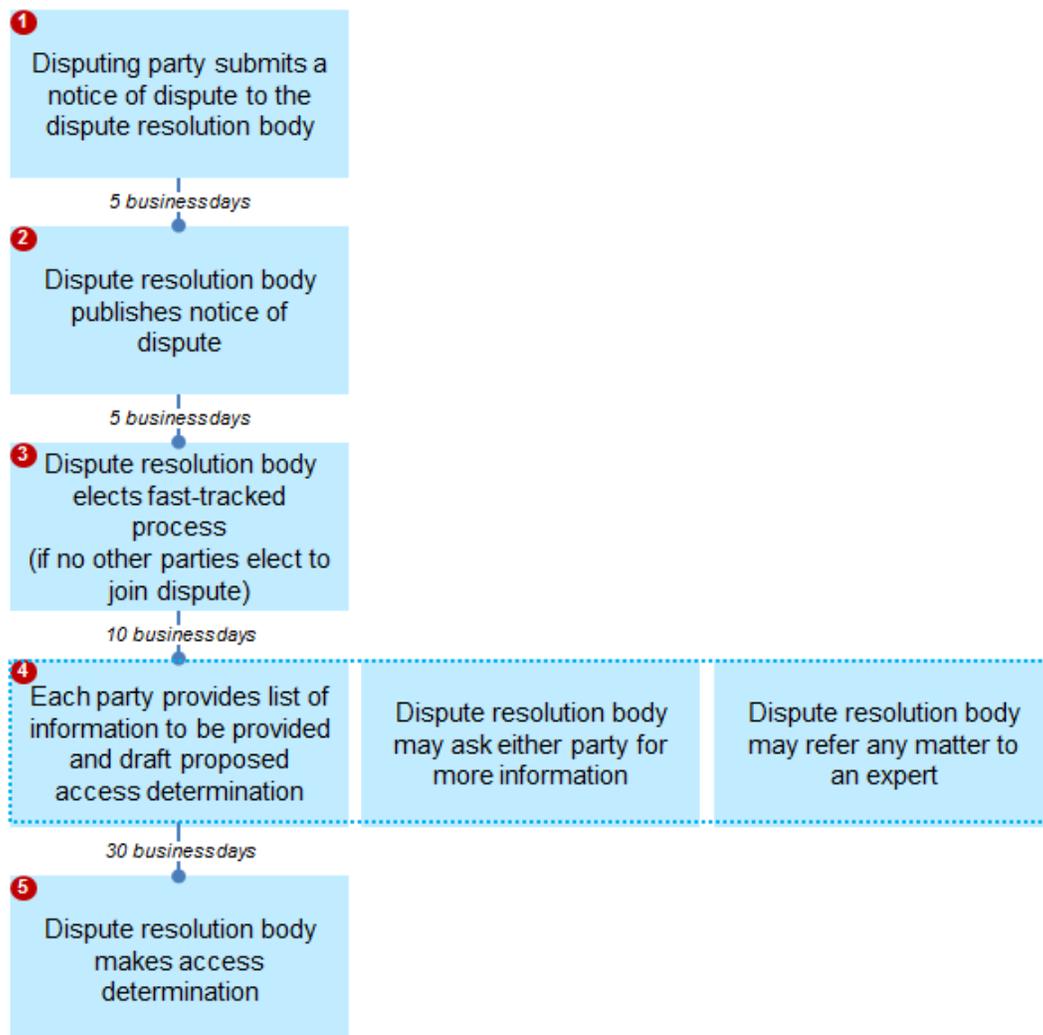
- the dispute resolution body publishes notice of dispute within five business days of the notice of dispute
- within five business days of publishing the notice of dispute, and if no parties wish to join the dispute:
 - if a prospective user raised the dispute and proposed that it be fast-tracked, then the dispute resolution body determines whether to use the fast-tracked process and notifies the parties
 - if a prospective user did not raise the dispute, or if it did not propose that the dispute be fast-tracked, then the dispute resolution body may select to use the fast-tracked process and must seek the approval of the prospective user
- the parties to the dispute provide proposed draft access determination and list of supporting information to be provided and information already provided during negotiations within 10 business days of the publication of the notice of dispute
- the dispute resolution body may ask a party to the dispute to provide further information and the party must do so within 10 business days⁵²⁹
- the dispute resolution body may refer any matter to the expert within the information request period and up to five business days after the party provides further information⁵³⁰
- the dispute resolution body makes a determination within 30 business days of the later of:
 - the parties to the dispute providing the list of information to be provided and proposed draft access determination
 - the parties providing the further information requested by the dispute resolution body
 - the expert providing its report to the dispute resolution body.

Figure 9.3 summarises the Commission's recommended fast-tracked dispute resolution process.

⁵²⁹ If this step applies, it would stop the clock on the overall 50 day timeframe.

⁵³⁰ If this step applies, it would stop the clock on the overall 50 day timeframe.

Figure 9.3 Recommended fast-tracked dispute resolution process



The draft report discussed whether the framework should include incentives for parties to the dispute to resolve it efficiently. One such incentive for the service provider could be the amendment of this provision such that it sets out an express obligation on the service provider to offer any spare capacity to the disputing user or prospective user under the reference terms and conditions from when the dispute notice is filed until the access determination is published. However, the Commission has not received strong feedback on this proposal. Moreover, the Commission considers that this may interfere with the outcomes of other commercial negotiations that the current framework safeguards. Therefore, the Commission has not considered this further in this report.

9.5.4 Final recommendation

Recommendation 30: Introduce a fast-tracked dispute resolution process

Set out that a dispute could be resolved under a fast-tracked dispute resolution process if it meets one or more of a set of criteria that are assessed by the dispute resolution body:

- the pipeline that is subject of the dispute is a full regulation pipeline

- the service that is subject of the dispute is the same or similar to the reference service
- provision of the access request does not require an extension of the pipeline
- any other criteria that the dispute resolution body considers would enable it to carry out the dispute resolution under the fast-tracked process.

The fast-tracked dispute resolution process could be triggered by the party raising the dispute, if it is a pipeline user or prospective user, or by the dispute resolution body, and must be approved by both.

The timeframe for the fast-tracked dispute resolution process must be 50 business days, with stop the clock provisions. The dispute resolution framework under Chapter 6 of the NGL would set out the steps and timeframes for the fast-tracked dispute resolution process.

9.6 Transparency

9.6.1 Summary of draft report findings and draft recommendations

The current framework under Chapter 6 of the NGL and Part 12 of the NGR does not clearly identify which information in relation to a dispute should be published. However, publication of information is desirable. Enhanced transparency in dispute resolution increases accountability of all the parties involved, and enhances the precedence of dispute resolution proceedings and outcomes. Moreover, increased transparency enables the joining of related disputes. The Commission considered these to be important features of the scheme pipeline arbitration framework.

The Commission considered that commercial sensitivity and protection of pre-existing contractual rights would be relevant to some information provided in the course of dispute resolution. Such information should be carefully assessed as to whether it should be disclosed. The Commission found that the process that the regulator follows to classify as confidential information that is obtained through other processes under s.329 of the NGL should also apply in the consideration of which dispute resolution information should be published.

Accordingly, the draft report included a draft recommendation aimed at providing more guidance on the publication of information related to disputes.

Draft recommendation 31: Publish dispute resolution commencement, outcome and information

That the NGL require the dispute resolution body to publish, as soon as practicable:

- a notice outlining parties to the dispute, and subject of the dispute
- the access determination and relevant financial calculations (if applicable, for example the capital base valuation)
- the information provided to the dispute resolution body during the course of the dispute, including independent expert reports.

The above should be subject to the confidentiality provisions under s. 329 of the NGL.

9.6.2 Stakeholder submissions to draft report

Stakeholder submissions to the draft report did not specifically comment on this draft recommendation.

9.6.3 Commission analysis

As noted above, the current framework under Chapter 6 of the NGL and Part 12 of the NGR does not clearly lay out which information in relation to a dispute should be published. However, enhanced transparency in dispute resolution increases accountability of all the parties involved, and enhances the precedent value of dispute resolution proceedings and outcomes. Moreover, increased transparency enables the joining of related disputes. The Commission considers these to be important features of the scheme pipeline dispute resolution framework.

The Commission acknowledges that not all information can be in the public domain. It considers that the main reasons for limiting the publication of information would be:

- commercial sensitivity of information disclosed in a dispute resolution process
- protection of pre-existing contractual rights.

Nevertheless, such considerations do not prevent the publication of some information, such as:

- a notice of the dispute (for example, dispute on tariffs for forward haul on pipeline z between party x and party y)
- the access determination
- the initial opening capital base determination (if applicable)
- the rolled forward capital base determination (if applicable).

In relation to the publication of the notice of dispute and access determination, the dispute resolution body should balance:

- the interests of the party that raised the dispute in keeping the dispute (and determination) confidential, so as not to deter parties from bringing matters to dispute resolution
- potential incentives and disincentives that arise for both parties from the knowledge that an access determination will be published
- precedent value of an access determination.

The Commission notes that under the NER, the dispute resolution panel is required to provide its determination to the AER for publication.⁵³¹ The New South Wales rail access undertaking also provides for the publication of arbitration outcomes.⁵³² Similarly, the ACCC publishes its arbitration determinations on its website in a public register.⁵³³

⁵³¹ Clause 8.2.10 of the NER.

⁵³² *New South Wales Rail Access Undertaking*, cl. 6.4.

⁵³³ See *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010*.

In regard to publishing information, the Hunter Valley Coal Network Access Undertaking states the following:⁵³⁴

- The arbitrator may publish its determination at its discretion subject to consideration of submissions by either party to the arbitration which are commercially sensitive or contain confidential information.
- At any time prior to the making of the determination, either party may give notice to the arbitrator of the information supplied by it which is either commercially sensitive to it or subject to confidentiality obligations, including the reasons why such information is commercially sensitive or confidential.
- After considering such submissions, the arbitrator may decide not to publish as part of its determination the information that is commercially sensitive or confidential to either party to the arbitration.

Commercial sensitivity and protection of pre-existing contractual rights would be relevant to other information provided in the course of dispute resolution. Nevertheless, the publication of relevant dispute information enhances the transparency of the process for all stakeholders, and facilitates the joining of other parties to disputes.

The Commission recommends that the dispute resolution body publish the following information in relation to a dispute:

- a notice outlining parties to the dispute, the pipeline that is subject of the dispute and the pipeline service that is subject of the dispute
- the access determination and relevant financial calculations
- any information provided to the dispute resolution body during the dispute, including expert reports.

The Commission considers that the process that the regulator follows to classify information that is obtained through other processes as confidential information under s. 329 of the NGL should also apply in the consideration of which dispute resolution information should be published. That provision allows information to be disclosed if:

- information disclosure would not be detrimental to the interests of the party that provided it
- although the disclosure of the information would cause detriment, the public benefit in disclosing it outweighs that detriment.

Each party to the dispute should be given the right to make submissions to the dispute resolution body as to confidentiality, but the default position would be publication.

9.6.4 Final recommendation

Recommendation 31: Publish dispute resolution commencement, outcome and information

Require the dispute resolution body to publish, as soon as practicable:

⁵³⁴ Australian Rail Track Corporation, *Hunter Valley Coal Access Undertaking*, 23 June 2011 (as varied on 17 October 2012, 25 June 2014, 22 June 2016, 23 November 2016 and June 2017)

- a notice outlining parties to the dispute, and subject of the dispute
- the access determination and relevant financial calculations (if applicable, for example the capital base valuation)
- the information provided to the dispute resolution body during the course of the dispute.

The above should be subject to the confidentiality provisions under s. 329 of the NGL, such that information may be disclosed if:

- information disclosure should not be detrimental to the interests of the party that provided it
- in case information disclosure is detrimental, that the public benefit in disclosing the information outweighs that detriment.

The Commission's recommendation is reflected in the drafting instructions for the NGL.

9.7 Joint dispute resolution hearings

9.7.1 Summary of draft report findings and draft recommendations

The publication of the notice of dispute is relevant to the ability to hold joint dispute resolution proceedings.

In the draft report, the Commission identified two deficiencies in the current joint dispute resolution framework in Chapter 6 of the NGL. First, it does not set out a process for other parties to join a dispute. Second, in the absence of a procedure for publishing the existence of a dispute, potential parties to the dispute have no formal means of becoming aware of its existence.

The Commission considered that a dispute notice should be published to signal the existence of a dispute (draft recommendation 31) and that the framework should set out a process for parties to join a dispute (draft recommendation 32).

Draft recommendation 32: Enable joint dispute resolution hearings

The Commission's draft recommendation was that Part 7 of Chapter 6 of the NGL be amended to enable parties to request that the dispute resolution body join them to an existing dispute. The NGL should also include the criteria for the dispute resolution body to accept or reject such a request, in addition to the process for parties to request to be joined to an existing dispute.

9.7.2 Stakeholder submissions to draft report

Several stakeholders commented on the joint dispute resolution draft recommendation. The ACCC considered that joint dispute resolution may not be necessary given that access negotiations were not likely to occur at the same time on the same pipeline.⁵³⁵ However, the MEU considered that advocacy groups and any interested parties should

⁵³⁵ ACCC, submission to the draft report, p. 14.

be able to join disputes.⁵³⁶ As a qualifier to the draft recommendation, APA suggested that parties should not be able to introduce unrelated issues to a joined dispute.⁵³⁷

9.7.3 Commission analysis

The publication of the notice of dispute is relevant to the ability to hold joint dispute resolution proceedings. This is included in the discussion in section 9.6 above.

Under Chapter 6 of the NGL, the dispute resolution body may add a party to the dispute if it is of the opinion that the resolution of that dispute may involve requiring that party to do something. The dispute resolution body may also add to the dispute a person who applies to be joined and who has a sufficient interest in the matter. In addition, joint hearings may be held if there are two or more disputes at a particular time and there are common matters in dispute.⁵³⁸

The Commission has identified two deficiencies in the current joint dispute resolution framework :

- it does not set out a process for other parties to join a dispute
- in the absence of a procedure for publishing the existence of a dispute, potential parties to the dispute have no formal means of becoming aware of its existence.

The Commission considers that parties may opt to join an existing dispute if they are unsuccessfully negotiating similar matters. Enabling this joining to occur would enhance the credibility of dispute resolution as a threat not only to the existing parties but also to other negotiations. Moreover, it would enhance the efficiency of the dispute process as dispute costs are shared across more parties.

Submissions to the draft report raised the following points in relation to joint dispute resolution hearings:

- joint dispute resolution may not be necessary given that access negotiations were not likely to occur at the same time on the same pipeline⁵³⁹
- advocacy groups and other interested parties should be able to join disputes⁵⁴⁰
- parties should not be able to introduce unrelated issues to a joined dispute.⁵⁴¹

As noted in the draft report, joint dispute resolution hearings could be particularly relevant for disputes that are raised by retailers or major industrial users in relation to transport tariffs on light regulation distribution pipelines that do not have limited access arrangements. They may also be useful for disputes regarding full regulation distribution pipelines.

The Commission considers that joining dispute resolution hearings should balance the following:

⁵³⁶ MEU, submission to the draft report, p. 21.

⁵³⁷ APA, submission to the draft report, p. 30.

⁵³⁸ Section 209(1) of the NGL.

⁵³⁹ ACCC, submission to the draft report, p. 14.

⁵⁴⁰ MEU, submission to the draft report, p. 21.

⁵⁴¹ APA, submission to the draft report, p. 30.

- the relevant interest of the applicant in the subject matter of dispute
- the likely degree of precedential value in the subject of the dispute
- the likelihood that adding a further party will cause delay or expense to the existing parties, or alternatively will reduce the cost of the dispute for each party
- the practicality of adding a party given the existence of any confidential material exchanged between existing parties.

Section 209 of the NGL guides the dispute resolution body in joining dispute resolution hearings. It addresses the concern of unrelated issues as it specifies that at least one issue should be common across disputes for the dispute resolution body to join them. The section does not limit which parties could join a dispute, but relates joining to the identification of common issues.

Therefore, in addition to the above recommendation that the existence of a dispute should be published, the Commission recommends that the framework also should set out a process for parties to join a dispute. This would enable interested parties to join existing disputes based on the dispute resolution body's assessment and approval. This reduces the potential for multiplicity of proceedings and accordingly contradictory, inconsistent or inefficient dispute resolution outcomes. The Commission regards these outcomes as being consistent with achieving the NGO.

9.7.4 Final recommendation

Recommendation 32: Enable joint dispute resolution hearings

Enable parties to request that the dispute resolution body join them to an existing dispute as follows:

- within five business days of the publication of a dispute resolution notice, a party may request to join a dispute and state the reasons why
- the dispute resolution body may approve or refuse that party's request to be joined to the existing dispute, based on a set of factors that include:
 - there are one or more matters in common to the access disputes
 - hearing the access disputes together would be likely to result in the disputes being resolved in a more efficient and timely manner.

The Commission's recommendation is reflected in the drafting instructions for the NGL.

9.8 Link between dispute resolution framework under the NGL and state commercial arbitration legislation

9.8.1 Summary of draft report findings and draft recommendations

In the draft report, the Commission explored the reference in the NGL to state commercial arbitration legislation. Sections 270B and 270C of the NGL provide two additions to the rights and obligations of parties under the NGL and NGR:

- Section 270B incorporates procedural parts of the relevant commercial arbitration acts into the hearing of a 'rule dispute' and decisions or determinations of a 'dispute resolution panel'.

- Section 270C creates a right of appeal on questions of law against a decision or determination of a dispute resolution panel or a decision that is classified as an appealable decision.

These provisions of the NGL provide that the relevant state commercial arbitration acts only apply to the hearing of a 'rule dispute' and decisions or determinations of a 'dispute resolution panel', as those terms are defined in the NGL.

A 'rule dispute' is defined in the NGL as "a dispute for the resolution of which provision is made in the Rules".⁵⁴² A 'dispute resolution panel' is defined as "a person or panel of persons appointed under the Rules to hear and determine a rule dispute". Accordingly, the relevant sections only become operative if the NGR provide for the resolution of the dispute.

Part 12 of the NGR currently provides for two specific situations, namely the binding effect of an independent expert safety report and the proper method of treatment of past capital contributions. As such, it is Chapter 6 of the NGL where provision is made for the resolution of disputes and not Part 12 of the NGR. On this basis, it was the Commission's view that Part 12 of the NGR does not provide for the "resolution" of a dispute, and therefore, that ss. 270A-270C of the NGL do not apply to disputes under the dispute resolution framework under Chapter 6 of the NGL and Part 12 NGR.

The Commission's view in the draft report was that the position is less clear in relation to the application of ss. 270A - 270C of the NGL (and therefore, the incorporation of the procedural parts and review provisions of the commercial arbitration act for each state) to disputes under the dispute resolution framework under Chapter 6A of the NGL and Part 23 of the NGR.

The Commission made a draft recommendation that in order to resolve any potential uncertainty concerning the application of the commercial arbitration acts to disputes under Chapter 6 of the NGL (including Part 12 of the NGR) and to Chapter 6A of the NGL (including Part 23 of the NGR), the NGL should be amended so that it would be clear that ss. 270A - 270C (and therefore the relevant parts of the commercial arbitration acts) do not apply to disputes under Chapters 6 and 6A of the NGL. The Commission considered that this would give precedence to the provisions contained in the NGL over potentially conflicting provisions in the commercial arbitration acts.

Draft recommendation 33: Clarify the definition of rule disputes under the NGL

The Commission's draft recommendation was to clarify in the NGL that the term 'rule dispute' does not include a dispute under Chapter 6 of the NGL (including Part 12 of the NGR) and Chapter 6A/Part 23. Therefore, the jurisdictional commercial arbitration acts do not apply to disputes under Chapter 6 of the NGL (including Part 12 of the NGR) and Chapter 6A/Part 23.

9.8.2 Stakeholder submissions to draft report

Stakeholder submissions to the draft report did not specifically comment on this draft recommendation.

⁵⁴² See definition of 'rule dispute' in s. 2 of the NGL.

9.8.3 Commission analysis

The Commission explored the reference in the NGL to state commercial arbitration legislation. Sections 270B and 270C of the NGL provide two additions to the rights and obligations of parties under the NGL and NGR.

It is still the Commission's view that Part 12 of the NGR does not provide for the "resolution" of a dispute, and therefore, that ss. 270A-270C of the NGL do not currently apply to disputes under the dispute resolution framework under Chapter 6 of the NGL and Part 12 of the NGR.

Moreover, the Commission has recommended amendments to Chapter 6 of the NGL in relation to the dispute resolution framework, rather than recommending amendments to Part 12 of the NGR.

As the position is clear in relation to Chapter 6 of the NGL and Part 12 of the NGR, the Commission has decided not to propose such a recommendation in this final report.

10 Implementation of recommendations

The Commission has made 32 recommendations in order to enhance the efficiency and effectiveness of the covered gas pipeline regulatory framework.

If implemented in full, these recommendations will help pipeline users and prospective negotiate lower tariffs and better terms and conditions for their gas transportation agreements.

This chapter sets out the implementation plan for the Commission's recommendations, which includes:

- recommendation packages and next steps by other stakeholders
- impact on future access arrangement reviews and other regulatory obligations.

10.1 Recommendation packages and next steps

This section summarises recommendation packages, next steps and legal amendments.

10.1.1 Recommendation packages

The Commission has provided drafting of recommended changes to the NGR, as well drafting instructions for proposed amendments to the NGL. The amendments give effect to the recommendations of this report, and have been prepared to aid in the prompt implementation of the recommendations.

The recommendations are packaged based on whether they require NGR changes only, or both NGL and NGR changes, as follows:

- **Package 1 NGR amendments: amendments to the NGR for immediate consideration through a rule change request to the Commission to give effect to the Commission's recommendations that do not require NGL changes**
 - updating extension and expansion requirements (recommendation 2)
 - describing reference and pipeline services and introducing a reference service setting process (recommendations 5 to 8)
 - improvements to the access arrangement process (recommendations 9 to 14)
 - clarifying the provisions relating to the calculation of efficient costs (recommendations 15 to 20), which includes:
 - transitional rule on the calculation of an initial opening capital base for light regulation pipelines (recommendation 17)
 - transitional rule on the calculation of an initial opening capital base for an existing uncovered expansion or extension that the service provider elects to cover and rolling it into the opening capital base of the pipeline (recommendations 4 and 18)
 - information provision by service providers (recommendations 21 to 26).

The Commission has provided a copy of the proposed draft rules for consideration by the COAG Energy Council and other stakeholders. A rule

change request including these amendments can be promptly submitted to the AEMC for consideration through a faster than standard rule change process (see discussion in section 10.1.3). A faster rule change process would enable the new rules to be in place before the revision submission dates for full access arrangements due to the regulators from January 2021 (see discussion in section 10.2).

- **Package 2 NGL and NGR amendments: amendments to the NGL by the South Australian parliament on the recommendation of the COAG Energy Council, and amendments to the NGR either by the COAG Energy Council on recommendation of the South Australian Minister or through a rule change request to the Commission in order to give effect to the Commission's recommendations that require both NGL and NGR changes:**
 - dispute resolution (NGL amendments) (recommendations 27 to 32)
 - consequential amendment to create an access negotiation process with clear dispute resolution proceeding triggers (NGR amendment) (recommendation 27)
 - consequential amendments on the treatment of expansions and extensions for covered pipelines (NGL and NGR amendments) (recommendations 2 to 3).

The Commission has provided drafting instructions for NGL amendments to give effect to these recommendations, for consideration by the COAG Energy Council. The process to make the recommended amendments to the NGL can be carried out concurrently with the package 1 rule change process noted above.

As discussed in Chapter 3, the Commission has also recommended that the COAG Energy Council task it with a review into the processes and tests for determining the form of regulation that applies to gas pipelines to commence in 2019 at the same time (or as part of) the scheduled review of Part 23 of the NGR (see recommendation 1).

The proposed amendments to the NGR and NGL, if made, may require consequential action by the regulators and AEMO to update guidelines, systems and procedures, which will be considered further in the rule change process. In particular:

- the introduction of financial reporting requirements for scheme pipelines will also require the regulators to develop and publish financial reporting guidelines for this purpose
- the implementation of recommendation 22 will require amendments to the Bulletin Board (including BB procedures) by AEMO.

Other voluntary guidelines made by the regulators on access arrangements and arbitration should also be updated to reflect changes to the NGR and NGL.

In addition, where any new rules are recommended to be civil penalty or conduct provisions of the NGR, subsequent changes to the National Gas Regulations will be required.

Figure 10.1 summarises the recommendation packages, and whether the changes need to be implemented before upcoming access arrangement reviews in order to apply to the pipelines subject to those access arrangements.

Figure 10.1 Recommendation packages

Commission's recommendations	Change to NGR	Change to NGL	Consequential action required by other bodies	Amendment linked to access arrangement review
Package 1: NGR amendments				
Describing reference and pipeline services and introducing a reference service setting process	✓	✗	Regulator guidelines	✓
Improvements to the access arrangement process	✓	✗	Regulator guidelines and financial models	✓
Clarifying the operation of provisions relating to the calculation of efficient costs	✓	✗	Regulator guidelines	✓
Information provision by service providers	✓	✗	Bulletin Board update (AEMO) and financial guidelines (AER and ERA)	✗
Enabling inclusion of expansions and extensions in access arrangements	✓	✗	Regulator guidelines	✓
Setting an initial capital base for light regulation pipelines	✓	✗	Regulator guidelines	✓
Package 2: NGL and NGR amendments				
Dispute resolution	✗	✓	Regulator guidelines	✗
Treatment of expansions for covered pipelines	✓	✓		✓
Access negotiation process and dispute trigger	✓	✓		✗

10.1.2 Amendments to the NGL and NGR

Table 10.1 provides an outline of the Commission's recommendations and the required amendments to the NGL and NGR for packages 1 and 2.

Table 10.1 Recommendations and required amendments to the NGL and NGR

Recommendation	NGL or NGR amendments required
Package 1 NGR amendments	
Include all expansions in an access arrangement (recommendation 2)	Transitional rule and amendments to rule 104.
Enable existing extensions to be included in access arrangements (recommendation 4)	Transitional rule.
Clarify the requirements for describing pipeline services (recommendation 5)	Insertion of new rule 47A.
Clarify the requirements for describing reference services (recommendation 6)	Insertion of new rule 47A, amendments to rule 48 and omission of rule 101.
Update the test for determining a reference service (recommendation 7)	Insertion of new rule 47A, amendments to rule 48 and omission of rule 101.
Introduce a reference service proposal process and improve the access arrangement review process (recommendation 8)	Insertion of new rule 47A, the omission of rules 13 and 57 and the amendments to rules 50, 59 and 62.
Develop financial models to be used by service providers (recommendation 9)	Insertion of new rules 75A and 75B.
Clarify the operation of revenue caps (recommendation 10)	Amendment to rule 92.
Clarify that the regulator is to have regard to risk sharing arrangements (recommendation 11)	Amendments to rules 97 and 100.
Extend the revision period (recommendation 12)	Amendment to rule 59.
Clarify the process for equalising revenue during the interval of delay (recommendation 13)	Amendments to rules 3 and 92.
Remove the limited and no discretion regulatory framework (recommendation 14)	Omission of rule 40 and amendments to rules 50, 79, 89, 91, 94 and 95.
Provide guidance on the allowed return for speculative capital expenditure (recommendation 15)	Amendments to rule 84.
Clarify the application of the new capital expenditure criteria (recommendation 16)	Amendments to rule 79.
Require an initial capital base valuation for light regulation pipelines (recommendation 17)	Proposed rule 35A in Part 7.
Enable the addition of existing extensions and expansions to the opening capital base (recommendation 18)	Transitional rule.
Require allocation of expenditure between covered and uncovered parts of a pipeline (recommendation 19)	Amendments to rules 79 and 91.
Amend definition of rebateable services and rebate methodology (recommendation 20)	Amendments to rule 93 and 97.
Require transmission pipeline service providers to disclose Bulletin Board information (recommendation 21)	Omission of rule 111 and amendments to rules 141, 145, 177.
Require distribution pipeline service providers to disclose capacity and usage information (recommendation 22)	Proposed rules 35B, 36A to 36C in Part 7, 112A, 112B, 112C and 112D in Division 2 of Part 11.
Clarify the role of the regulator in passing on information requests to service providers (recommendation 23)	Amendments to rule 107.

Recommendation	NGL or NGR amendments required
Introduce a financial and offer information disclosure regime for light regulation pipelines (recommendation 24)	Proposed rules 35B, 36A, 36D to 36F, in Division 2 of Part 11 and amendments to rule 36.
Remove the requirement to provide KPIs as part of the access arrangement (recommendation 25)	Amendments to rules 45 and 72.
Improve the Scheme Register (recommendation 26)	Amendments to rules 133 to 135 and insertion of new rule 135A.
Package 2 NGL and NGR amendments	
Include all expansions in an access arrangement (recommendation 2)	Amendments to ss. 2 and 18 of the NGL.
Remove regulator's discretion to exclude an expansion from light regulation (recommendation 3)	Amendments to ss. 2 and 19 of the NGL.
Amend trigger for dispute resolution process (recommendation 27)	Amendments to NGL and NGR – see drafting instructions.
Clarify the role of the dispute resolution expert (recommendation 28)	Amendments to NGL – see drafting instructions.
Establish a reference framework for the dispute resolution body (recommendation 29)	Amendments to NGL – see drafting instructions.
Introduce a fast-tracked dispute resolution process (recommendation 30)	Amendments to NGL – see drafting instructions.
Publish dispute resolution commencement, outcome and other information (recommendation 31)	Amendments to NGL – see drafting instructions.
Enable joint dispute resolution hearings (recommendation 32)	Amendments to NGL – see drafting instructions.

10.1.3 Rule change process

The AEMC makes and amends the rules that govern the economic regulation of gas pipelines. Rule changes that are recommended as part of an AEMC review can be subsequently requested by any party, as the AEMC is not able to submit a rule change request.

The timeframe for the standard rule change process is approximately six months from the publication of a notice to initiate the rule change process to the final rule determination. However, depending on the complexity of the issue the AEMC can complete the standard process in a shorter timeframe, or the timeframe can be extended in certain circumstances. Under the standard process there are two opportunities for stakeholders to make written submissions in advance of the draft and final determinations.⁵⁴³ Figure 10.2 summarises the standard rule change process.

⁵⁴³ AEMC, *A guide to the rule change process*, June 2017.

Figure 10.2 Standard rule change process



If all of the package 1 rule changes are submitted to the AEMC as a single rule change request, it is likely to be appropriate to consider them through a standard rule change process given the number of changes that are proposed and the benefits of obtaining stakeholder feedback on the proposed rule drafting. However, the Commission expects that the consultation that has been undertaken as part of this review will enable it to complete the standard rule change process in less than the usual six month timeframe. If part of the package 1 rule changes are submitted ahead of the rest of the package, then depending on the nature of the proposed rule changes it may be appropriate to consider using the fast-track rule change process, which takes about four months to complete.

10.1.4 Transitional rules

Box 10.1 sets out the transitional rules that the Commission recommends as part of the NGR amendments in package 1.

Box 10.1 Transitional rules (package 1)

Transitional rules in package 1 cover the following:

- calculation of an initial opening capital base for light regulation pipelines (recommendation 17)

“Within six months of the commencement date of the Amending Rule, the AER must determine and publish an opening capital base for any light regulation pipeline which, at the commencement date:

- does not have an opening capital base that has been calculated by the AER in accordance with these rules at any time; or
- does not have an opening capital base that has been calculated in accordance with the Gas Code at any time.”
- inclusion of an existing expansion that is not included in the current access arrangement in the access arrangement at the next access arrangement review (recommendation 2)

“A service provider to whom this rule applies must, in the extension and expansion requirements of its upcoming access arrangement proposal, include all expansions of the capacity of the covered pipeline to which the access arrangement proposal relates that have not previously been included in the access arrangement, such that the expansions of the capacity of the covered pipeline will be taken to be part of the covered pipeline and the access arrangement will apply to pipeline services provided by means of the covered pipeline as expanded.

A service provider to whom this rule applies must, as part of its access arrangement proposal, calculate the opening capital base for those parts of the pipeline that comprise previous expansions of the covered pipeline in accordance with rule 77(1).

A service provider to whom this rule applies must, as part of its access arrangement proposal, include access arrangement information in relation to those parts of the pipeline that comprise the expansion in accordance with rule 72.”

- at the service provider's election, inclusion of an existing extension that is not included in the current access arrangement in the access arrangement at the next access arrangement review (recommendation 4).

10.2 Impact on future access arrangement reviews and other regulatory obligations

Currently there are 13 covered pipelines subject to full regulation. Service providers of these pipelines must submit full access arrangement revision proposals to the regulator for approval periodically (typically every five years). The access arrangements for all 13 covered pipelines are due for revision over the next four years.

In order for the Commission's recommendations relating to the preparation of revised access arrangement proposals to be effective and apply to the majority of full regulation pipelines as soon as possible, the NGR amendments and transitional rules in package 1 relating to the following recommendations must be submitted for immediate consideration to the Commission:

- describing pipeline services and introducing a reference service setting process
- improvements to the access arrangement process
- clarifying the operation of provisions relating to the calculation of efficient costs
- the treatment of expansions and extensions for covered pipelines
- setting an initial capital base for light regulation pipelines.

Amendments to the NGR and NGL relating to the recommendations on information provision (package 1: NGR amendments) and dispute resolution (Package 2: NGL amendments) do not affect the timing of access arrangement revision proposals, but nevertheless should be implemented expeditiously in order for the benefits of these changes to take effect. Recommendations on information provision require service providers to start disclosing the required information within five months of the commencement of the rules.

Table 10.2 shows the timetable for the review processes of these access arrangement revision proposals. It also identifies the potential reference service proposal due date, if the relevant rule changes arising from recommendation 8 were made.

Table 10.2 Access arrangement revision timetable

Access arrangement	State	Transmission or distribution	Access arrangement revision proposal due date	Reference service proposal due date
Mid West and South West Gas Distribution Systems 2020-2024	Western Australia	Distribution	1 September 2018	1 September 2017
Jemena Gas Networks 2021-2025	New South Wales	Distribution	30 June 2019	30 June 2018
Goldfields Gas Pipeline 2020-2025	Western Australia	Transmission	1 January 2019	1 January 2018
Dampier to Bunbury Pipeline 2021-2025	Western Australia	Transmission	1 January 2020	1 January 2019
Evoenergy 2021-2026	Australian Capital Territory	Distribution	30 June 2020	30 June 2019
Amadeus Gas Pipeline 2021-2026	Northern Territory	Transmission	1 July 2020	1 July 2019
Australian Gas Networks South Australia 2021-2026	South Australia	Distribution	1 July 2020	1 July 2019
Australian Gas Networks Albury 2022-2027	Albury	Distribution	1 January 2021	1 January 2020
Australian Gas Networks Victoria 2022-2027	Victoria	Distribution	1 January 2021	1 January 2020
Multinet 2022-2027	Victoria	Distribution	1 January 2021	1 January 2020
AusNet Services 2022-2027	Victoria	Distribution	1 January 2021	1 January 2020
Roma Brisbane Pipeline 2022-2027	Queensland	Transmission	1 July 2021	1 July 2020
Victorian Transmission System 2023-2027	Victoria	Transmission	1 January 2022	1 January 2021

Source: AER and ERAWA

Abbreviations

ACCC	Australia Competition & Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
COAG	Council of Australian Governments
Code	National third party access code for natural gas pipeline systems
Commission	See AEMC
DBP	Dampier to Bunbury Pipeline
DTS	Declared Transmission System
EDA	Western Australian Energy Disputes Arbitrator
ERA	Economic Regulation Authority of Western Australia
GGP	Goldfields Gas Pipeline
GMRG	Gas Market Reform Group
GSH	gas supply hub
IPART	Independent Pricing and Regulatory Tribunal of New South Wales
KPI	key performance indicator
NCC	National Competition Council
NEM	national electricity market
NER	National Electricity Rules
NGL	National Gas Law
NGL (WA)	National Gas Access (WA) Act 2009
NGO	national gas objective
NGR	National Gas Rules
PTRM	post tax revenue model
RBP	Roma Brisbane Pipeline
Report	interim report
Review	Review into scope of economic regulation applied to covered pipelines

RIN	regulatory information notice
RIO	regulatory information order
RFM	roll forward model

A Summary of other issues raised in submissions

Table A.1 sets out the issues raised in submissions to the issues paper and draft report that have not otherwise been addressed in this final report.

Table A.1 Submissions to the issues paper and draft report not otherwise addressed in the final report

Stakeholder	Issue	AEMC response
Framework for pipeline regulation		
MEU, submission to the issues paper, pp. 6-7.	A pipeline with contracts under competitive tender should be subject to regulation when the contracts expire.	The competitive tender process remains in the regime. These pipelines will now be subject to Part 23 following the expiration of the competitive tender access arrangement.
PIAC, submission to the draft report, p. 5.	The Draft Report argued that reform of the coverage criteria is no longer necessary because the introduction of the Part 23 access regime for non-scheme pipelines means that pipelines now face a form of regulation.	The draft report commented that the introduction of the access regime for non-scheme pipelines appears to have addressed a problem with the regime prior to its introduction. The coverage determination does not appear fit for purpose in its new role of determining which form of regulation applies (refer to the discussion in Chapter 3). Changes to the coverage determination should be considered as part of a review of the framework for economic regulation (recommendation 1).
MEU, submission to the draft report, pp. 4-5, 10.	The rules for removing a pipeline from being regulated are significantly different from those which would impose regulation.	The test for determining whether a pipeline that is not currently covered should be covered is identical to the test for determining whether a pipeline that is currently covered should not be covered. Similarly, the test for moving from light regulation to full regulation is identical to moving from full regulation to light regulation. That these tests have tended to result in a level of regulation that the MEU considers unsuitable is a function of the criteria within the tests and their application, not because the tests are themselves asymmetric. Further consideration of the tests and their application should be considered as part of a review of the framework for economic regulation (recommendation 1).

Stakeholder	Issue	AEMC response
MEU, submission to the draft report, p. 5.	The application of a price cap approach to regulating a pipeline allows the pipeline owner to sell other services on the same pipeline where the reference service effectively covers the full cost of the pipeline operation. The sale of these other services allows the pipeline owner to recover more revenue that was assessed by the regulator as being an efficient revenue stream.	As noted in Chapter 7, rule 93 of the NGR includes provisions that require the allocation of total revenue across reference services and other services to reflect the allocation of costs attributable to reference services and other services. In circumstances other than where the regulator allocates total costs exclusively to reference services, the sale of other services does not necessarily result in the recovery of more revenue than the total revenue determined by the regulator.
MEU, submission to the draft report, pp. 5-6.	There could be further improvements to the access regime for non-scheme pipelines.	Detailed consideration of the access regime for non-scheme pipelines was out of scope for this review. The planned post-implementation review of the regime in 2019 will be an opportunity to consider improvements to the access regime for non-scheme pipelines.
MEU, submission to the draft report, p. 9.	The AEMC asserts that a reversion to the changes proposed in the Harper review to the wording of the legislation providing third party access under the Competition and Consumer Act (CCA) will provide “a lower bar” to prove a need to regulate a gas pipeline.	As per the discussion in Chapter 3 of this report, the Commission asserted in the draft report that changes to the coverage criteria consistent with those recently made to the declaration criteria in Part IIIA Competition and Consumer Act will likely provide a higher bar (that is, in all likelihood more difficult to obtain coverage). The Commission cautions against making changes to the coverage criteria to make them more consistent with those of the national access regime, without also considering more substantial changes to these regulatory decision making arrangements.
MEU, submission to the issues paper, p. 6.	The AEMC should consider whether all transmission pipelines should operate under the market carriage approached (currently used for the Victorian DTS) rather than the contract carriage system used outside the DTS.	The Commission has previously concluded that contract carriage remains appropriate outside the Victorian DTS.

Stakeholder	Issue	AEMC response
MEU, submission to the draft report, p. 5.	The application of contract carriage for a pipeline provides an avenue for the pipeline owner to sell other services and for permitting hoarding of capacity.	The Commission has previously concluded that contract carriage remains appropriate outside the Victorian DTS (also refer to AEMC response to MEU, submission to the issues paper, p.6 above). Transportation capacity trading reforms are being introduced to address issues with the secondary trading of transportation capacity. This work is being undertaken by the Gas Market Reform Group, consistent with recommendations made by the AEMC in its review of east coast gas markets. ⁵⁴⁴
MEU, submission to the draft report, p. 5.	Where a pipeline need not be regulated due to all of its capacity being managed under a long term contract (whether due to being addressed under a “greenfield” approach or otherwise) when that contract expires, this should not result in the pipeline no longer being regulated and it should revert to being covered as a regulated pipeline.	The Commission considers that whether and what type of regulation should apply is a trade off between the direct and indirect cost of regulation and the effectiveness of the regulation at limiting the exercise of market power. Tests to determine whether regulation should apply, and the type of regulation, should consider this trade-off. Automatically reverting pipelines to a different coverage status as a consequence of changes in circumstances does not consider this trade-off. Instead, the tests for determining which form of regulation should be (re)applied given the change in circumstances, to determine the appropriate form of regulation (or no regulation at all). Any party can ask for a (re)assessment of the coverage determination or light regulation determination at any time.
Submissions to the draft report: PIAC, p. 4; EUAA, p. 2.	It is inappropriate for any form of regulation other than full regulation to apply to distribution pipelines because other forms of regulation provide an insufficient level of protection against the market power of the distribution service provider.	<p>Consistent with the discussion in section 3.4, the Commission considers that in determining which form of regulation should apply, a trade-off should be made between the costs and benefits of different types of regulation. Consequently:</p> <ul style="list-style-type: none"> the Commission considers that the coverage determination is not appropriate for determining which form of regulation applies with regard to the application of light regulation to covered pipelines, the Commission considers that the light regulation determination test is likely to be an appropriate mechanism for determining the appropriate form of regulation - balancing the costs of regulation with the extent of the market power. It is for the NCC to apply this test and determine the form of regulation in a consultative manner.
EnergyAustralia, submission to the draft report, p. 2.	The introduction of Part 23 could result in the under-regulation of distribution pipelines	
ATCO, submission to the draft report, p. 1.	It is important for the Commission to recognise the increasingly competitive environment being faced by distribution gas pipelines.	

⁵⁴⁴ AEMC, *East coast wholesale gas markets and pipeline frameworks review*, Stage 2 Final Report, 23 May 2016, recommendations 5-8.

Stakeholder	Issue	AEMC response
ATCO, submission to the draft report, p. 2.	ATCO is concerned that a general tightening of the regulatory regime (including through the recommendations of the draft report) risks stifling innovation.	As noted in Chapter 3, the Commission recommends significant improvements various aspects of the economic regulatory regime. On balance, the Commission considers that with these improvements, the regime appropriately balances the costs and benefits of regulation. The negotiate-arbitrate regime has the advantage of allowing pipeline service providers to adapt flexibly to changing user preferences, prospective new users, and developments in natural gas markets.
ATCO, submission to the draft report, attachment 2.	The existing mechanism with the NGR to encourage innovation are unlikely to encourage regulated service providers to invest in innovative technologies because: the mechanisms and returns to do provide sufficient headroom for such expenditure; and network businesses are incentivised on short-term goals rather than innovation which could deliver benefits over multiple access arrangements.	Under rule 98 of the NGR, a full access arrangement may include (and the AER may require it to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider. This may provide for carrying over increments for efficiency gains and decrements for losses of efficiency from one access arrangement period to the next. This appears to be the mechanism to address ATCO's concerns.
Reference services		
MEU, submission to draft report, p. 14.	MEU considers AER should use the upfront process to determine the form of price control that is applied to service providers (revenue cap, price cap, revenue yield control).	The Commission has recommended the introduction of a reference service process so that there is a single process dedicated to the determination of reference services before total revenue is determined. This process will occur prior to the access arrangement revision process that determines total revenue and tariff variation mechanism.
Access arrangements		
PIAC, submission to issues paper, p. 12.	The AER has not appropriately engaged consumers and consumer groups in the access arrangement process.	The Commission's draft recommendation to introduce a separate reference service process and make other process changes is expected to allow the regulator to better consult and engage with stakeholders and incorporate feedback.
Determining efficient costs		
PIAC, submission to the issues paper, p. 13.	The management of redundant assets should not have the effect of passing the risk associated with speculative investments to pipeline users and consumers.	The Commission considers that the redundant asset provisions under rules 85 and 86 provide incentives for service providers to spend efficient capital expenditure.

Stakeholder	Issue	AEMC response
PIAC, submission to the issues paper, p. 16.	There is no reflection in tariffs as a result of savings in other areas of the market, such as interest rate decreases. As the pipeline industry becomes increasingly privatised (including substantial foreign holdings), assumptions about the 'benchmark efficient entity' are no longer relevant. The AER has recently initiated two extensive review programs around the treatment of inflation and rate of return assessments.	The Commission has not recommended the removal of the concept of benchmark efficient entity from the NGR. The fundamentals of the regulatory framework are still relevant.
Submissions to the issues paper: PIAC, p. 27; EUAA, pp. 2-6.	Consideration should be given to introducing electricity networks' regulatory investment test for transmission (RIT-T) and regulatory investment test for distribution (RIT-D) to gas pipelines.	The Commission does not consider that there is a persuasive case for introducing a RIT process in the NGR. See AEMC interim report.
Jemena, submission to the issues paper, pp. 2-3	The AEMC should consider increasing flexibility in setting the discount rate for new connection capital under rule 119M(2)(a) Chapter 12A.	The Commission has not examined issues that are only relevant to Part 12A in this review.
EnergyAustralia, submission to the issues paper, p. 1.	While the allowed rate of return is transparent, it is nevertheless too high.	The Commission has not addressed issues in relation to the allowed rate of return. The value of the rate of return is a matter for the regulators.
APGA, submission to the issues paper, p. 5.	The pricing principles in Part 23 provide for a different approach to tariff setting (cost of providing the service, including a commercial rate of return) compared to the revenue and pricing principles for scheme pipelines (service provider is allowed to recover efficient costs, with incentives to lower the costs below the efficient cost).	The Commission has not examined issues that are only relevant to Chapter 6A or Part 23 in this review. A review on the implementation of the access regime for non-scheme pipelines is expected in 2019.

Stakeholder	Issue	AEMC response
Information and negotiation		
APGA, submission to the issues paper, p. 4.	The 10TJ/day exemption threshold under Part 23 (NGR 585) is appropriate for transmission pipelines but means that distribution networks are subject to Part 23 information obligations for little benefit for consumers. Existing uncovered small regional pipelines should not face increased regulatory compliance costs where there is no customer benefit.	The Commission has only examined issues that are relevant to scheme pipelines in this review. The operation of Part 23 of the NGR can be considered in the expected review into that regime in 2019.
ENA, submission to the issues paper, pp.10-11.	Existing uncovered small regional pipelines should not face increased regulatory compliance costs where there is no customer benefit.	The Commission has only examined issues that are relevant to scheme pipelines in this review. The operation of Part 23 of the NGR can be considered in the expected review into that regime in 2019.
EnergyAustralia submission to the draft report, p.3	Distributors should not be able to unilaterally change B2B processes with retailers (where not governed by AEMO) unilaterally. Changes can have adverse effects on retailers and may therefore not reflect the most efficient means of providing a service, and may result in higher prices for customers.	The Commission has not examined B2B processes. The Commission has focussed on issues relevant to Parts 8-12 of the NGR.
Arbitration		
ACCC, submission to the issues paper, pp. 10-11.	The ACCC considers the arbitration framework should be consistent across all pipelines and suggests that the process set out in Part 23 (Division 4) be adopted for covered pipelines.	The Commission has addressed the issues raised in relation to arbitration on scheme pipelines and informed some of its findings by discussions with the GMRG and other stakeholders.
AER, submission to the issues paper, pp. 23-24	The AER can amend its arbitration guidelines to minimise uncertainty around the timeframes and methodologies.	The Commission has only considered law and rule changes to address issues in the dispute resolution framework. AER can issue arbitration guidelines under its own initiative.

Stakeholder	Issue	AEMC response
APGA, submission to the draft report, p. 3 and pp. 10-12.	There had been no evidence that the dispute resolution framework required review.	The Commission refers to the ACCC inquiry that found that the dispute resolution framework for scheme pipelines does not constitute a credible threat. ⁵⁴⁵ The Commission also refers to stakeholder submissions and discussions of issues in the current framework. The Commission considers that a perception of an issue with the current framework would deter users from triggering it and reduce its effectiveness as a credible threat to monopolistic behaviour. As such, the Commission has addressed the issues raised with the recommendations of this report.
AGIG, submission to the draft report, p. 2.	Some of the draft recommendations would add to the regime's complexity.	The Commission has confined its recommendations to addressing the issues raised in the course of the review. The Commission has addressed the issues raised with measured recommendations that balance the costs with the benefits of making changes to the regime.
ATCO, submission to the draft report, p. 8.	ATCO does not consider it is a high priority to amend the NGR to better align arbitration arrangements for covered pipelines with those for non-scheme pipelines.	The Commission has proposed amendments to the dispute resolution framework for scheme pipelines to address issues identified by stakeholders. The Commission has discussed its recommendations with GMRG in response to the Terms of Reference for the review.
ATCO, submission to the draft report, p. 8.	Implementing the draft recommendations in Western Australia will require further consideration as the Energy Disputes Arbitrator is the dispute resolution body.	The Commission has engaged the Energy Disputes Arbitrator throughout the review. EDA has submitted to both the issues paper and the draft report, and has supported the application of the recommendations in Western Australia.

⁵⁴⁵ ACCC, *Inquiry into the east coast gas market*, April 2016.

Stakeholder	Issue	AEMC response
Other issues		
Power and Water NT, submission to the issues paper, pp. 3-4, 6.	NTPWC is concerned that the day ahead capacity auction that could provide capacity at potentially near zero cost.	The Commission has not examined secondary market issues in this review.
AGL, submission to the issues paper, p. 3.	In relation to transmission pipelines, which are mostly uncovered, the ability to trade capacity between third parties is limited, with the service providers inserting themselves in the transactions. In addition, responses to requests can be slow. These restrictions prohibit the development of gas as a tradeable commodity.	The Commission has not examined secondary market issues in this review.
PIAC, submission to the issues paper, pp. 4, 9, 13.	Consider any limitations brought about by the absence of a single national energy objective for gas regulation as well as other energy frameworks.	The role of the NGO is not part of this review.
Submissions to the issues paper: Jemena, pp. 2-3; DBP and AGN, pp. 5-8; ENA, pp. 5-6.	The definition of natural gas in the NGL may be restrictive in that it may exclude various other gases (or mixtures of gases) that might appropriately fall under the economic regulation regime.	The Commission recognises the importance of this question, but considers this review of economic regulation is not the most appropriate process to give it due consideration. See AEMC interim report.
Power and Water NT, submission to the issues paper, pp. 4-5.	The AEMC should consider the interests of foundation users of pipelines by requiring service providers to pass through to foundation users the benefits equivalent to those afforded to users of regulated services (most favoured nation clauses).	Outside of access arrangements, parties are able to reach agreement on terms and conditions that best suit their circumstances, subject to the requirements of law, including competition law. See AEMC interim report.

B Overview of related reforms

This review is related to a number of other reviews and reforms. In particular:

- AEMC's East coast wholesale gas market and pipeline frameworks review
- AEMC's Review of the Victorian declared wholesale gas market
- ACCC's Inquiry into the east coast gas market
- Dr Michael Vertigan's Examination of the current test for the regulation of gas pipelines
- Chapter 6A of the NGL, to establish an arbitration framework for non-scheme pipelines as recommended by Dr Vertigan and developed by the GMRG
- Part 23 of the NGR, to set out the access regime for non-scheme pipelines as recommended by Dr Vertigan and developed by the GMRG.

A summary of each is set out below.

B.1 East coast wholesale gas market and pipeline frameworks review

On 20 February 2015, the COAG Energy Council issued terms of reference for the east coast wholesale gas market and pipeline frameworks review to the AEMC. The purpose of the review was to support the COAG Energy Council's objective to establish a liquid wholesale gas market that:⁵⁴⁶

- provides market signals for investment and supply
- facilitates responses to market signals through a supportive investment and regulatory environment
- focuses trade at a point that best serves the needs of participants
- establishes an efficient reference price
- connects consumers and trading markets to infrastructure that enables trade between locations and arbitrage of trading opportunities.

In undertaking this review, the AEMC was requested to consider:

- improving effective risk management in Australian gas markets
- enhancing transparency and price discovery in facilitated gas markets, and reducing barriers to entry
- signals and incentives for efficient access to and use of pipeline capacity.

The AEMC published its stage 1 final report on 23 July 2015, which found that:⁵⁴⁷

- likelihood of the short term trading market (STTM) hubs delivering efficient reference prices is questionable
- some aspects of the pipeline arrangements used outside of Victoria impede the efficiency with which capacity rights are reallocated and used

⁵⁴⁶ COAG Energy Council, Communique 11 December 2014, item 5.

⁵⁴⁷ AEMC, *East coast wholesale gas market and pipeline frameworks review, stage 1 final report*, 23 July 2015.

- information sources on the eastern Australian gas market are fragmented and somewhat under-developed by international standards.

The report recommended short term initiatives for immediate implementation, and a scope of work for more substantial recommendations to be developed in stage 2 of the review.

The AEMC published its stage 2 final report on 23 May 2016.⁵⁴⁸ This report addressed the issues identified in the stage 1 final report through a recommended package of reforms, including:

- development of two primary trading hubs, one each in Queensland and Victoria
- simplification of the current STTM hubs to balancing mechanisms
- introduction of day ahead capacity auctions
- standardisation of primary and secondary contractual terms for pipeline and hub services
- creation of pipeline capacity trading platforms
- improved information, including publication of information on all secondary trades
- improvements to the Natural Gas Services Bulletin Board
- governance and implementation proposals, including establishing a dedicated gas reform group (now the Gas Market Reform Group or GMRG) to develop the required package of changes.

B.2 Review of the Victorian declared wholesale gas market

The AEMC undertook a review of the Victorian declared wholesale gas market (DWGM review). The DWGM review was pursuant to terms of reference issued by the Victorian Government on 4 March 2015.⁵⁴⁹ Rule change requests arising from this review are anticipated to be submitted by the Victorian Government later in 2018.

B.3 Inquiry into the east coast gas market

On 9 April 2015 the Commonwealth Minister for Small Business and Assistant Treasurer directed the ACCC to hold an inquiry into the “competitiveness of wholesale gas prices and the structure of the upstream, processing, transportation, storage and marketing segments of the gas industry”.⁵⁵⁰

The ACCC used its information gathering powers under Part VIIA of the *Competition and Consumer Act 2010 (Cth)* to investigate the claims of industrial users and suppliers.

The scope of the inquiry, as set out in the Minister’s direction, required the ACCC to take into consideration:

⁵⁴⁸ AEMC, *East coast wholesale gas market and pipeline frameworks review, stage 2 final report*, 23 May 2016.

⁵⁴⁹ AEMC, *Review of the Victorian declared wholesale market, final report*, 14 October 2016.

⁵⁵⁰ ACCC, *Inquiry into the east coast gas market*, April 2016, Appendix 2.

- availability and competitiveness of offers to supply gas and the competitiveness and transparency of gas prices
- restrictions on market structures for gas production, gas processing and gas transportation
- significance of barriers to entry into the upstream production sector
- existence of, or potential for, anti-competitive behaviour on purchasers of gas
- transaction costs, information transparency including gas supply contractual terms, and other factors influencing the competitiveness of the markets.

The scope excluded competition in gas retail markets.

The ACCC provided its report to the Minister on 13 April 2016, which set out the ACCC's inquiry findings, including:⁵⁵¹

- evidence that a large number of pipeline operators have been engaging in monopoly pricing that has given rise to higher delivered gas prices and is having an adverse effect on the economic efficiency of the east coast gas market and upstream and downstream markets
- evidence that the ability and incentive of existing pipeline operators to engage in this behaviour is not being effectively constrained by competition from other pipelines, competition from alternative energy sources, the risk of stranding, the countervailing power of shippers, regulation or the threat of regulation
- that the current gas access regime is not imposing an effective constraint on the behaviour of a number of unregulated pipelines because
 - the current test for regulation under the NGL (the coverage criteria) is not designed to address the market failure that has been observed, that is, monopoly pricing that results in economic inefficiencies with little or no effect on the level of competition in dependent markets
 - other gaps in the regulatory framework are also allowing pipelines that are subject to regulation to engage in monopoly pricing
 - information asymmetries are limiting the ability of shippers to identify any exercise of market power and to negotiate effectively with pipeline operators.

The report recommended that the COAG Energy Council should replace the coverage test with a test that would be triggered if the relevant minister, having regard to the National Competition Council's (NCC) recommendation, is satisfied that: (a) the pipeline in question has substantial market power; (b) it is likely that the pipeline will continue to have substantial market power in the medium term; and (c) coverage will or is likely to contribute to the achievement of the NGO. The ACCC recommended that this issue be further considered by the AEMC.⁵⁵²

551 *ibid.*, p. 18.

552 *ibid.*, p. 11.

The ACCC also recommended that the COAG Energy Council ask the AEMC to review Parts 8 to 12 of the NGR, and make recommendations on any amendments that may be required to address the concern that pipelines subject to full regulation may still be able to exercise market power to the detriment of consumers and economic efficiency.⁵⁵³

The Australian Government subsequently directed the ACCC to hold an inquiry into the supply of and demand for wholesale gas in Australia over three years. Interim reports are required to be provided to the Treasurer at least every six months during the course of the inquiry with a final report to be provided by 30 April 2020.⁵⁵⁴ To date, the ACCC has published interim reports on 25 September 2017, 13 December 2017 and 27 April 2018.

B.4 Examination of the current test for the regulation of gas pipelines

On 19 August 2016, the COAG Energy Council released its gas market reform package in response to the AEMC east coast gas review and the ACCC inquiry.⁵⁵⁵ The COAG Energy Council accepted the AEMC's recommendation to form a dedicated gas reform group.

In addition, Dr Michael Vertigan was tasked to examine the coverage test for the regulation of gas pipelines and provide recommendations on any future action including potentially replacing the test. The COAG Energy Council was concerned that, based on the ACCC findings, "the current test does not appear to be working, and a new test may be needed to put downward pressure on transport prices."⁵⁵⁶

Dr Vertigan stated:⁵⁵⁷

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

Dr Vertigan published his report on the examination of the current test for the regulation of gas pipelines on 14 December 2016. The report noted the following issues as identified by various stakeholders:

- pipeline owners have market power, which is exercised during negotiations of gas transport agreements
- increasing the extent of regulation of the pipeline industry is not supported and considered ineffective in addressing customer concerns

⁵⁵³ *ibid.*, p. 20.

⁵⁵⁴ Treasurer, Inquiry for improving the transparency of gas supply in Australia, terms of reference, 19 April 2017.

⁵⁵⁵ COAG Energy Council, Meeting communique, 19 August 2016.

⁵⁵⁶ *ibid.*, p. 1.

⁵⁵⁷ Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, 14 December 2016, p. 12.

- pipeline operators have a superior negotiating position, and information asymmetry exists with pipeline customers
- the absence of adequate publicly available information on prices and terms, as well as the methodology used to determine these and the costs incurred by pipeline operators, have made it difficult for small shippers to assess what a reasonable offering would be
- gas transport prices are higher than would be the case in a fully competitive or fully regulated environment
- total return on a gas pipeline business is double that of the average regulated electricity network operator⁵⁵⁸
- in some instances, the exercise of market power is resulting in inefficient outcomes that do not promote the NGO or facilitate the achievement of the COAG Energy Council's Vision for the establishment of a liquid wholesale gas market that provides market signals for investment and supply.⁵⁵⁹

Recommendation 4 of the report was that the coverage test not be changed at this stage.⁵⁶⁰ The report recommended a regime of enhanced information disclosure coupled with binding arbitration, which would be available to all open access gas pipelines (not just covered pipelines). The report's recommendations included:⁵⁶¹

- that the GMRG be tasked with developing a detailed design of the disclosure and transparency requirements and of the arbitration framework
- that the coverage test be reviewed within five years of the arbitration framework being operational.

Dr Vertigan also noted that "if the arbitration framework is to operate in the way it is envisaged then there may be no need to retain the light regulation option."⁵⁶²

B.5 Chapter 6A of the NGL

At its meeting on 14 December 2016, the COAG Energy Council asked the GMRG chair, Dr Vertigan, to bring forward the recommendations contained in his examination report to allow commencement on 1 May 2017, subject to the passage of amendments to relevant laws. On 17 February 2017, following public consultation, the COAG Energy Council agreed to changes to the NGL to establish a framework for information provision and arbitration for non-scheme pipelines.⁵⁶³ The National Gas (South

⁵⁵⁸ The examination report commissioned an analysis of total shareholder return to a pipeline operator through JP Morgan's Equity Research Team. The analysis examined returns over a ten-year period, and compared them directly with aggregated returns to regulated electricity asset owners and with the ASX 200.

⁵⁵⁹ *ibid.*, pp. 10-11.

⁵⁶⁰ *ibid.*, p. 16. Dr Vertigan did note that many stakeholders did not consider that the test constrained the behaviour of pipeline service providers (*ibid.*, p. 12).

⁵⁶¹ *ibid.*, pp. 13-17.

⁵⁶² *ibid.*, pp. 15-16.

⁵⁶³ National Gas (South Australia) (Pipelines Access - Arbitration) Amendment Act 2017.

Australia) (Pipelines Access - Arbitration) Amendment Act passed both houses of the South Australian parliament.⁵⁶⁴

The consequent Chapter 6A of the NGL outlines a dispute resolution process for non-scheme pipelines⁵⁶⁵ that has a number of similarities to the dispute resolution process for scheme pipelines that is set out in Chapter 6 of the NGL. It contains provisions that allow the NGR to exclude a pipeline, part of a pipeline or a pipeline service from the arbitration framework.⁵⁶⁶ Some existing contractual rights of users are protected.⁵⁶⁷ Chapter 6A provides for the NGR to set out information disclosure and collection requirements, and provides for the scheme administrator to be the AER.⁵⁶⁸ The negotiate-arbitrate process set out in Chapter 6A is as follows:⁵⁶⁹

- the parties must negotiate in good faith for access to pipeline services
- an access dispute can be triggered if negotiations break down
- the AER must refer an access dispute to arbitration
- the AER selects the arbitrator if the parties are unable to agree
- the arbitrator must make a determination, in accordance with the NGR
- costs will be borne equally between the parties, or as otherwise stated in the NGR
- a determination can be varied by agreement or in accordance with the NGR.

B.6 Part 23 of the NGR

On 21 March 2017, the GMRG published its Gas pipeline information disclosure and arbitration framework implementation options paper that set out five options for each of: information disclosure requirements; arbitration mechanisms; and arbitration principles as well as the GMRG's preferred options. The GMRG's preferred options were:⁵⁷⁰

- information disclosure: base level information that shippers require when considering whether to seek access to a pipeline, in addition to financial statements
- arbitration: conventional arbitration that provides additional procedural protections and partial transparency

⁵⁶⁴ The bill passed the South Australian Legislative Council on 20 June 2017. The relevant bill was passed through the Western Australian parliament in December 2017 and became operational on 23 December 2017.

⁵⁶⁵ A non-scheme pipeline is a pipeline that is not a 'covered pipeline' or an 'international pipeline' under the NGL and NGR.

⁵⁶⁶ Chapter 6A of the NGL, s. 216C.

⁵⁶⁷ *ibid.*, s. 216N.

⁵⁶⁸ *ibid.*, s. 216A. The ERA became the WA scheme administrator on 23 December 2017.

⁵⁶⁹ *ibid.*, ss. 216G-216V.

⁵⁷⁰ GMRG, *Gas pipeline information disclosure and arbitration framework implementation options paper*, March 2017, p. xi.

- pricing and other principles: pricing principles based on cost of service provision, supplemented by other principles.

On 5 June 2017, the GMRG published its final design recommendations on the information disclosure and arbitration framework.

The GMRG developed its final initial rules to implement its design recommendation which were agreed by the COAG Energy Council in July 2017. On the 1st August 2017 these rules were made by the South Australian Minister for Mineral Resources and Energy and became Part 23 of the NGR⁵⁷¹. The objective of Part 23 is:⁵⁷²

“The objective of this Part is to facilitate access to pipeline services on non-scheme pipelines on reasonable terms, which, for the purposes of this Part, is taken to mean at prices and on other terms and conditions that, so far as practical, reflect the outcomes of a workably competitive market.”

The elements of Part 23 of the NGR are described in sections B.6.1 to B.6.3 below.

B.6.1 Information disclosure

Part 23 of the NGR requires non-scheme pipeline service providers to publish on their website information that would be useful for shippers to negotiate access.⁵⁷³ In December 2017, the AER published guidelines for information provision that provide detailed guidance to supplement the rules.⁵⁷⁴

Under the financial reporting guidelines, non-scheme pipeline service providers subject to financial reporting under Part 23 are required to report the following:⁵⁷⁵

- pipeline service and access information
- individual pipeline financial statements including revenues and costs, assets and details of how the accounts have been prepared
- asset valuation – calculated using the recovered capital methodology that takes into account previous returns the pipeline specified in Part 23
- weighted average prices for pipeline services.

B.6.2 Arbitration regime

Part 23 sets out an arbitration regime with the following key features:

- The arbitrator is a commercial arbitrator and is selected from a pool.⁵⁷⁶

⁵⁷¹ Clause 294 of the Bill provides for the South Australian Minister to make the initial rules.

⁵⁷² Rule 546 of the NGR.

⁵⁷³ Rules 552-557 of the NGR.

⁵⁷⁴ AER, *Financial reporting guideline for non-scheme pipelines*, December 2017. The ERA will also develop and publish guidelines.

⁵⁷⁵ AER, *Financial reporting guideline for non-scheme pipelines explanatory statement*, December 2017, pp. 2-3.

⁵⁷⁶ Rule 549(1) of the NGR.

- Arbitration can be used to settle disputes in relation to all aspects of access to all types of pipeline services offered (excluding, for example, disputes that require an extension to a pipeline).⁵⁷⁷
- Arbitration uses the information exchanged by parties in negotiations. The arbitrator has the discretion to conduct hearings and request further information if required.⁵⁷⁸
- The regulator, as scheme administrator of the arbitration regime, may provide administrative support to the arbitrator and potential disputants, including through the provision of a non-binding arbitration guide that outlines the process for the determination of access disputes under the NGL and NGR.⁵⁷⁹

B.6.3 Arbitration principles

Part 23 stipulates that the arbitrator must take the following into account:⁵⁸⁰

- pricing principles, which state that the price for access should reflect the cost of providing the service, including a commercial rate of return commensurate with the prevailing market conditions and reflecting the risks faced by the service provider
- access should be available on reasonable terms
- operational and technical requirements necessary for the safe and reliable operation of the facility.

Part 23 stipulates that the arbitrator may take the following into account:

- legitimate business interests of the service provider
- interests of all persons who have rights to use the pipeline
- value to the service provider of extensions and expansions of the pipeline whose cost is borne by someone else
- value to the service provider of interconnections to the facility whose cost is borne by someone else.

Where access is for a pipeline service that when used affects the capacity of the non-scheme pipeline available for other pipeline services, and that is priced at a premium or discount from firm haulage, then the arbitrator should take into account the opportunity cost and/or benefit of providing the service relative to the firm service (taking into account effects on cost and/or capacity) and provide a reasonable contribution to joint and common costs.

⁵⁷⁷ Rule 563 of the NGR.

⁵⁷⁸ Rule 574 of the NGR.

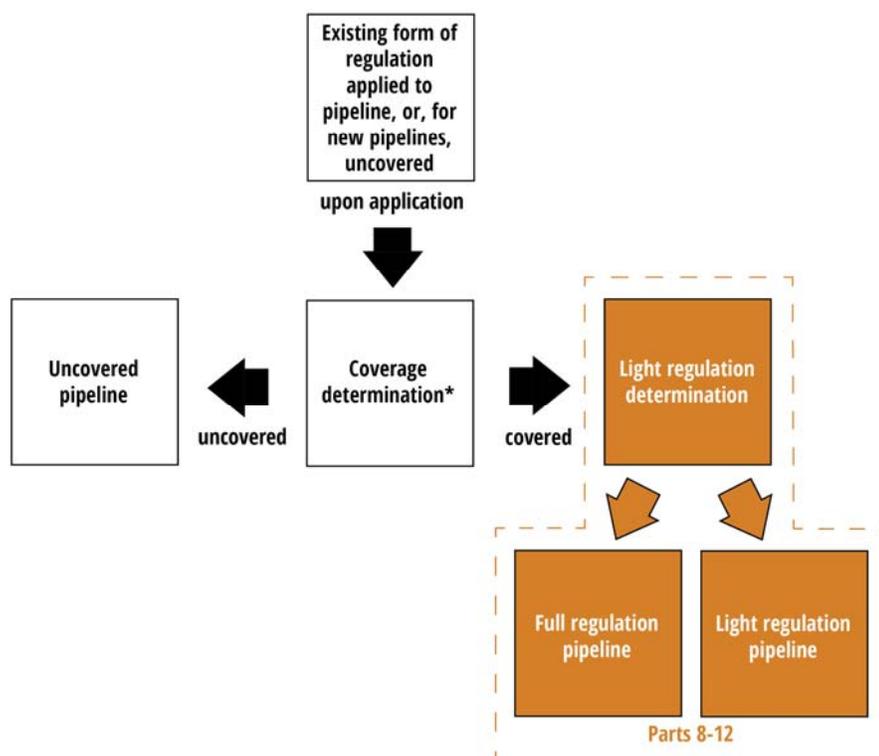
⁵⁷⁹ Rule 582 of the NGR.

⁵⁸⁰ Rule 569 of the NGR.

C Overview of framework for pipeline regulation

Prior to 1 August 2017, the framework for pipeline regulation was as summarised in Figure D.1.

Figure C.1 Overview of framework prior to 1 August 2017



* Coverage criteria in National Gas Law similar to those in Part IIIA of the CCA.

Note that Figure D.1 is not intended to be an exhaustive representation of the framework prior to 1 August 2017. For example, a pipeline could also be covered if deemed a covered pipeline when the code came into effect, developed through a competitive tender process approved by the AER (s. 126 of the NGL) or if the service provider submitted a voluntary access arrangement to the AER (s. 127 of the NGL). Furthermore, applications could be made for tests to be reapplied so that over time, pipelines could move between forms of regulation.

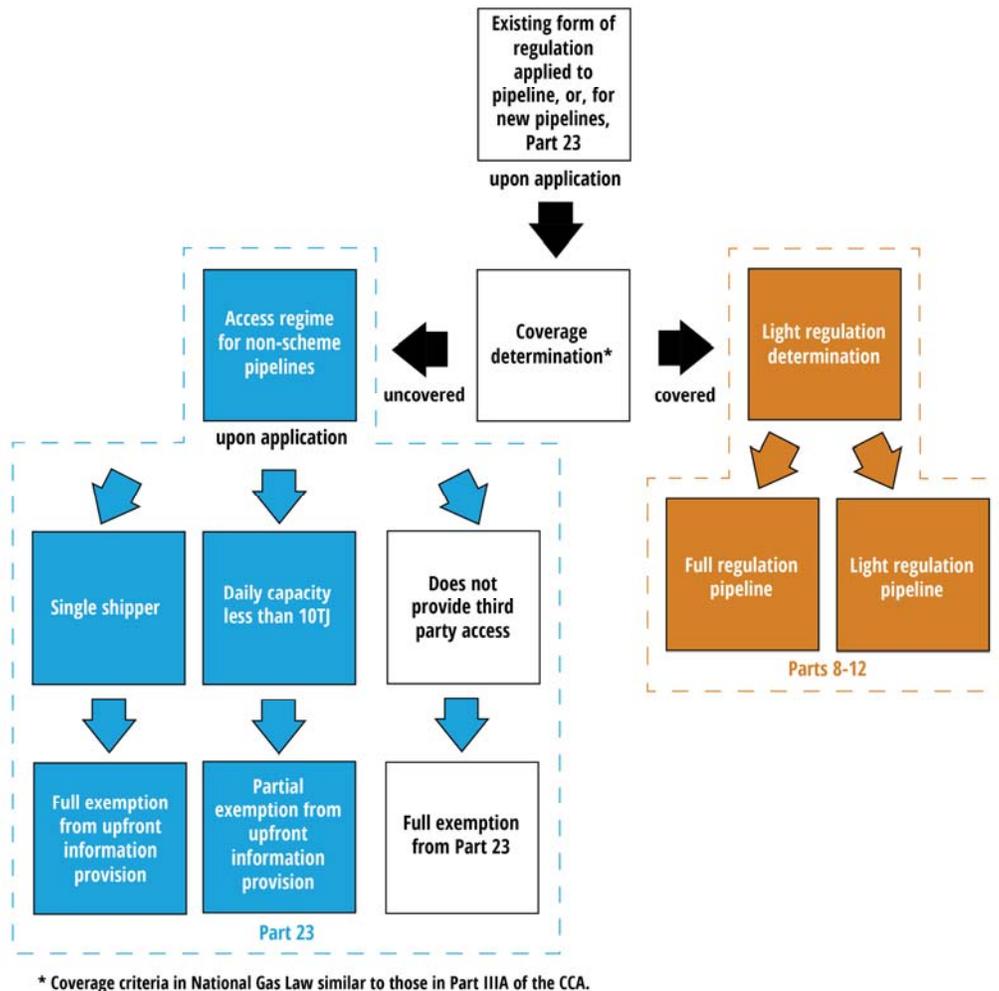
There were two forms of regulation (full and light) and two successive tests which could be applied upon application by certain parties (as discussed below) for determining firstly whether regulation should apply (the coverage determination) and if so, secondly, which form of regulation should apply (the light regulation determination).

Additionally, under s. 151 of the NGL, a service provider of a greenfields pipeline that was yet to be commissioned could apply to the National Competition Council (NCC) for a determination that exempts the pipeline from coverage for 15 years.⁵⁸¹

⁵⁸¹ Additionally, under s. 160 of the NGL, a service provider of an international greenfields pipeline can apply to be exempt from price or revenue regulation. There has never been an international

On 1 August 2017, the framework was changed, with the introduction of an access regime for non-scheme pipelines⁵⁸² (Part 23 of the NGR) enabled by changes to the NGL (Chapter 6A).⁵⁸³ The current regime for pipeline regulation is summarised in Figure D.2.

Figure C.2 Overview of current framework



Note that, as with Figure D.1, Figure D.2 is not intended to be an exhaustive representation of the current framework. For example, a pipeline may also be covered if deemed a covered pipeline when the code came into effect, developed through a competitive tender process approved by the AER (s. 126 of the NGL) or if the service

greenfields pipelines that has applied for or been granted an exemption from price or revenue regulation. Given this, and that there have been no issues raised or identified with regard to the international greenfields pipeline exemption regime, only very limited further discussion of them is provided in this report.

⁵⁸² A non-scheme pipeline is defined in s. 216C of the NGL as a pipeline which is not a scheme pipeline (including pipelines which have been exempt from coverage, or is not an international pipeline to which a price regulation exemption applies).

⁵⁸³ *National Gas (South Australia) (Pipelines Access – Arbitration) Amendment Act 2017*. Under s. 216C(2) of the NGL, Chapter 6A also does not apply to a pipeline excluded from the operation of Chapter 6A by the NGR.

provider submits a voluntary access arrangement to the regulator (s. 127 of the NGL). Furthermore, applications can be made for tests to be reapplied so that over time, pipelines can move between forms of regulation.

There are now three main forms of regulation: full, light and the access regime for non-scheme pipelines. There are also a number of full or partial exemptions from regulation within Part 23. There are three groups of tests which determine which form of regulation (or no regulation) should apply: the pre-existing coverage determination, the pre-existing light regulation determination and an exemption regime within Part 23.

Service providers of greenfields pipelines may continue to apply for an exemption from coverage. However, greenfields pipelines which have been granted a 15-year no-coverage determination are defined as non-scheme pipelines and so are regulated as such.⁵⁸⁴

As can be seen by comparing Figure D.1 with Figure D.2, those pipelines which are uncovered are now subject to regulation under Part 23 (unless the pipeline does not provide third party access). Previously, uncovered pipelines were not subject to any form of economic regulation. At the time of introduction of Part 23 to the NGR, no other consequential changes were made to the existing forms of regulation (full or light) or the wording of the coverage determination or light regulation determination.

Each of the elements of the current regime for pipeline regulation is described in more detail below.

C.1 Forms of regulation

While the forms of regulation that can apply have substantial differences, in common to all is that they are negotiate-arbitrate regimes.

Prospective users and service providers are able to negotiate access by negotiating the tariff and the non-tariff terms and conditions for the service. The central importance of negotiation in the regime is emphasised in s. 322 of the NGL, which notes that nothing in the NGL is to be taken as preventing a service provider from entering into an agreement with a user or a prospective user about access to a pipeline service provided by means of a scheme pipeline.

In all cases where regulation is applied, underpinning these negotiations is the ability of prospective users to take unresolved negotiations to arbitration which is binding on the service provider. In an arbitration to seek access to a pipeline, the arbitrator will determine tariff and non-tariff terms and conditions for the provision of the service in dispute. An arbitrated tariff, or the threat of an arbitrated tariff, is intended to restrict a service provider's ability to withhold access entirely, or to price monopolistically. The threat of arbitration is also intended to constrain the service provider from exercising its market power (to the extent that it holds it) in negotiations.

These arrangements are in place for both transmission and distribution pipelines.

⁵⁸⁴ International greenfields pipelines that have been granted exemption from price or revenue regulation are not subject to any form of regulation. In contrast to (domestic) greenfields pipelines they are defined as scheme pipelines under the NGL, and hence the access regime for non-scheme pipelines does not apply.

Appendix E provides a map which details which form of regulation applies to each pipeline in Australia.

C.1.1 Full regulation

The key distinguishing feature of full regulation is that the regulator (AER or ERA) undertakes an assessment of, and subsequently approves, a full access arrangement or revisions to a full access arrangement. The access arrangement determines at least one reference service, and the corresponding reference tariff and non-tariff terms and conditions. The access arrangement is made binding through s.189 of the NGL, which states that the dispute resolution body (arbitrator) must give effect to the access arrangement. While the access arrangement is therefore enforced through arbitration, it is, for practical purposes, indistinguishable from ex ante price cap regulation (a form of direct, regulatory price control) applied to reference services, with the reference tariff acting as the price cap.

Where a prospective user of the pipeline seeks a service other than the reference service it is able to negotiate the tariff and terms and conditions of that service. Reference tariffs and reference services act as a direct constraint on a pipeline service provider's ability to price reference services monopolistically (or deliver a lower service standard). More importantly, however, within the negotiate-arbitrate framework, the primary rationale of reference services and reference tariffs is to inform negotiations between service providers and users, in reference to the access arrangement. If negotiation does not result in a mutually agreeable outcome, an arbitrator determines the tariff and non-tariff terms and conditions for a non-reference service, informed by the reference services, reference tariffs and associated non-tariff terms and conditions.⁵⁸⁵

As covered pipelines, full regulation pipelines also have other regulatory requirements, which include:

- The general duties of a service provider, such as:⁵⁸⁶
 - requirements not to prevent or hinder access⁵⁸⁷
 - where the service provider has offer terms and conditions for supply and haulage on a pipeline, the service provider is required to offer terms and conditions at a producer's exit flange and a statement of reasons of the difference in the two sets of terms and conditions in case the price offered at the exit flange is different⁵⁸⁸
 - complying with queuing requirements set out in the applicable access arrangement.⁵⁸⁹
- structural and operational separation requirements (ring fencing), such as:

⁵⁸⁵ Section 189 of the NGL requires that the arbitrator ("dispute resolution body") must "give effect" to the access arrangement.

⁵⁸⁶ As set out in Chapter 4 Part 1 of the NGL.

⁵⁸⁷ Section 133 of the NGL.

⁵⁸⁸ Section 134 of the NGL.

⁵⁸⁹ Section 135 of the NGL

- prohibition on the carrying on of a related business⁵⁹⁰
- providing lists of associates of the service provider, including those that provide pipeline services or related services, and associated contracts⁵⁹¹
- keeping separate accounts for each covered pipeline and consolidated business accounts⁵⁹²
- complying with all ring fencing requirements on and from the notified compliance date in the ring fencing determination⁵⁹³
- Other requirements on a service provider of a full regulation pipeline are set out in the NGL and NGR, and include:
 - a prohibition on the bundling of services⁵⁹⁴ and confidentiality requirements⁵⁹⁵
 - responding to access requests⁵⁹⁶ and complying with access determinations⁵⁹⁷
 - publishing access arrangements on its website.⁵⁹⁸

Service providers of full regulation pipelines are required to report to the regulator on the compliance status of these requirements annually.⁵⁹⁹

C.1.2 Light regulation

A negotiate-arbitrate regime applies to all services provided by the light regulation pipeline. If negotiation does not result in a mutually agreeable outcome, an arbitrator determines a service and tariff and non-tariff terms and conditions.

In contrast to a full regulation pipeline, a light regulation pipeline is not required to have an access arrangement, and even in the case where it chooses to submit a limited access arrangement,⁶⁰⁰ no reference services or reference tariffs are determined for that

590 Section 139 of the NGL.

591 Sections 147 & 148 of the NGL.

592 Section 141 of the NGL.

593 Section 143(6) of the NGL.

594 Rule 109 of the NGR.

595 Rule 137 of the NGR.

596 Rule 112 of the NGR.

597 Section 195 of the NGL.

598 Rule 107 of the NGR.

599 All covered pipelines (both full and light regulation) are required to comply with the AER's Annual Compliance Order. The order requires covered transmission and distribution pipeline service providers to report on their compliance status regarding key regulatory obligations for the 12 month period ending 30 June of that year. The Order was issued under s. 48(1) of the NGL in November 2008 (AER, *Overview of compliance reports by gas distribution and transmission pipelines, for reporting period 2015-16*, June 2017).

600 Under s. 116(2) of the NGL, a service provider providing light regulation services may choose, but is not required, to submit a limited access arrangement. Rule 45 states that a limited access arrangement must identify the pipeline, describe the pipeline services, state non-tariff terms and

limited access arrangement. Where a light regulation pipeline service provider elects to not submit a limited access arrangement, it must publish certain information on its website.⁶⁰¹ A more detailed discussion of information provision requirements for light regulation is provided in Chapter 8.

The main benefit of light regulation compared to full regulation is the avoided upfront cost of developing a full access arrangement – particularly determining reference services and reference tariffs. However, this means that prospective users of a light regulation pipeline do not receive the benefits of regulator approved reference services and reference tariffs to inform their negotiation processes or the associated information submitted to the regulator in support of the access arrangement. Instead, they must rely on the information provision requirements under light regulation or the limited access arrangement (if there is one).

As covered pipelines, light regulation pipelines also have many of the other regulatory requirements which apply to full regulation pipelines noted above.

C.1.3 Access regime for non-scheme pipelines

The access regime for non-scheme pipelines under Part 23 of the NGR is also a negotiate-arbitrate regime. As such, it requires the publication of certain information by the service provider.

The access regime for non-scheme pipelines shares key characteristics of light regulation:

- neither involve the upfront determination of reference services and reference tariffs (unlike full regulation)
- both require the provision of information by service providers to aid service seekers in their negotiations
- both have a binding arbitration regime.

However, the specifics of the regimes are different, as summarised in table 3.1 in Chapter 3. More detailed discussions of the differences and similarities between scheme and non-scheme pipelines regarding information provision requirements and the arbitration frameworks are provided in Chapters 8 and 9 respectively.

Additionally, there are a number of exemptions from certain provisions in Part 23. Exemptions are applied for by the service provider and are granted by the relevant regulator as follows:⁶⁰²

- Pipelines that do not provide third party access are exempt from all provisions in Part 23, and consequently, have no economic regulatory obligations
- Pipelines that are single shipper pipelines:
 - are subject to arbitration provisions, but

conditions, in addition to specified requirements. A limited access arrangement does not include tariffs.

⁶⁰¹ Rule 36(2) of the NGR.

⁶⁰² Rules 585 to 590 of the NGR.

- are exempt from all information publication provisions of Part 23, but are still required to provide information to a prospective user through the negotiation process or to an arbitrator should arbitration be sought
- Pipelines with an average daily injection of gas calculated over the immediately preceding 24 months of less than 10TJ per day:
 - are subject to arbitration provisions, and
 - are required to publish certain usage and availability information under Part 23, but
 - are exempt from publishing all financial information and certain other usage and availability information under Part 23 but are still required to provide this information to a prospective user through the negotiation process or to an arbitrator should arbitration be sought.

New pipelines are, by default, regulated under Part 23 of the NGR (subject to exemption) until such time that a coverage application is made (discussed below) and, as a result of that application, a coverage determination is made to cover the pipeline.

C.2 Tests for determining which form of regulation applies

The following tests determine which form of regulation applies.

The discussion below is not intended to be an exhaustive description of each of the tests, with the discussion instead focusing on those aspects of the tests which have potential associated issues.

C.2.1 Coverage determination

The way in which coverage determinations are made is set out in Part 1 of Chapter 3 of the NGL.

An application for a coverage (or a revocation of coverage) determination can be made by any person to the NCC. Once such an application is received, the NCC is required to assess the application and make a recommendation to the relevant Minister⁶⁰³ who makes the decision based on the coverage criteria and the NGO. The NCC is required to publicly consult on the application in accordance with the standard consultation procedures.⁶⁰⁴ The standard consultative procedures require two rounds of written consultation.

State Minister coverage determinations can be challenged in accordance with state administrative law regimes. Some states have specific legislation, while others rely on

⁶⁰³ If the pipeline is completely within one jurisdiction, the relevant Minister of that jurisdiction or for a transmission pipeline situated wholly within a participating jurisdiction, the designated Minister (as defined in the relevant application Act). If a transmission pipeline crosses jurisdictional boundaries then the decision is made by the Commonwealth Minister. If a distribution pipeline crosses jurisdictional boundaries then the decision is made by the Minister of the jurisdiction with which the pipeline is most closely connected. See the definition of ‘relevant Minister’ in s. 2 of the NGL. Section 9 of the *National Gas (Queensland) Act 2008* (Qld) defines ‘designated Minister’ as the Commonwealth Minister.

⁶⁰⁴ Rules 8, 16 and 19 of the NGR.

the common law.⁶⁰⁵ Commonwealth Minister coverage determinations can be challenged in accordance with the *Administrative Decisions (Judicial Review) Act 1977* (Cth) (ADJR Act).⁶⁰⁶

The *Competition and Consumer Amendment (Abolition of Limited Merits Review) Act 2017* removes merits review⁶⁰⁷ of Commonwealth Minister coverage determinations made under the NGL.⁶⁰⁸

The current coverage determination determines whether a pipeline is:

- covered, and so subject full or light regulation, or
- uncovered, and so subject to the access regime for non-scheme pipelines (noting that the regulator can exempt a pipeline from all regulatory economic requirements under Part 23 if it does not provide third party access).

As noted above, this represents a change to the framework that existed prior to 1 August 2017, where an uncovered pipeline was not subject to any form of economic regulation (other than the threat of coverage).

The coverage determination remains worded as it was prior to the introduction of Part 23. The four criteria below (the pipeline coverage criteria) must all be met for a pipeline to be recommended by the NCC to the relevant Minister for coverage.⁶⁰⁹ The NCC is also required take into account the NGO in making its recommendation.⁶¹⁰ The coverage criteria in the NGL were initially modelled on the declaration criteria in the *Competition and Consumer Act*,⁶¹¹ and are as follows:

- (a) that access (or increased access) to pipeline services provided by means of the pipeline would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the pipeline services provided by means of the pipeline
- (b) that it would be uneconomic for anyone to develop another pipeline to provide the pipeline services provided by means of the pipeline

⁶⁰⁵ For example, Queensland has the *Judicial Review Act 1991* (Qld), while in NSW, review is under common law and usually proceeds in the Common Law Division of the Supreme Court under the Administrative Law List by proceedings known as “judicial review of administrative action”.

⁶⁰⁶ The ADJR Act applies to decisions by a “Commonwealth authority” of an administrative character and an application can be made to the Federal Court based on one of the grounds for review set out in s. 5 of the ADJR Act.

⁶⁰⁷ The fundamental distinction between judicial and merits review is whether the review assesses the legality or merits of the decision.

⁶⁰⁸ The amendments made by the *Competition and Consumer Amendment (Abolition of Limited Merits Review) Act 2017* to the *Competition and Consumer Act 2010* (Cth) remove merits review of Commonwealth Minister decisions, but in theory, leave it open for each state to set up its own state specific legislation and decision making body to provide for merits review of decisions by state Ministers, although no such process currently exists in any of the states.

⁶⁰⁹ See ss. 15 and 97 of the NGL.

⁶¹⁰ Section 97(1)(b) of the NGL.

⁶¹¹ Part IIIA of the *Competition and Consumer Act* is a general third party access regime. However, recent changes to the declaration criteria in Part IIIA made by the *Competition and Consumer Amendment (Competition Policy Review) Act 2017* (Cth) have increased the differences between the Part IIIA criteria and the coverage criteria in the NGL.

- (c) that access (or increased access) to the pipeline services provided by means of the pipeline can be provided without undue risk to human health or safety
- (d) that access (or increased access) to the pipeline services provided by means of the pipeline would not be contrary to the public interest.

C.2.2 Light regulation determination

A light regulation determination determines whether full or light regulation applies to a covered pipeline.

Under s. 110 of the NGL, at the same time as the NCC makes a coverage recommendation to the relevant Minister, it must also decide whether to make a light regulation determination.

In addition, under s. 112 of the NGL, the service provider of a covered pipeline can apply to the NCC for a light regulation determination under which the services provided by that covered pipeline are classified as light regulation services. Any person can apply to the NCC to revoke a light regulation determination.⁶¹² A light regulation determination is made by the NCC (not the Minister on the advice of the NCC) depending on, among other factors:⁶¹³

- the effectiveness of the form of regulation to promote access
- the likely cost of the various forms of regulation
- consistency with the NGO
- the form of regulation factors, which are:⁶¹⁴
 - the presence and extent of any barriers to entry in a market for pipeline services
 - the presence and extent of any network externalities (that is, interdependencies) between a natural gas service provided by a service provider and any other natural gas service provided by the service provider
 - the presence and extent of any network externalities (that is, interdependencies) between a natural gas service provided by a service provider and any other service provided by the service provider in any other market
 - the extent to which any market power possessed by a service provider is, or is likely to be, mitigated by any countervailing market power possessed by a user or prospective user
 - the presence and extent of any substitute, and the elasticity of demand, in a market for a pipeline service in which a service provider provides that service

⁶¹² Sections 117 and 118 of the NGL.

⁶¹³ Section 122 of the NGL.

⁶¹⁴ These are set out in s. 16 of the NGL.

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

The NCC must consult on applications for light regulation determinations under the standard consultative procedures.⁶¹⁵

Light regulation determinations of the NCC are subject to judicial review under the ADJR Act. Merits review of NCC decisions is no longer available.⁶¹⁶

C.2.3 Part 23 exemption framework

As noted above, there is an exemption framework within Part 23 of the NGR which can be used to determine which specific provisions of Part 23 apply to a particular non-scheme pipeline.

In the cases of exemptions for small pipelines and single shipper pipelines, the exemption regime is intended to reduce the regulatory burden in circumstances where the cost of regulation under all the provisions of Part 23 is likely to outweigh the benefits.⁶¹⁷

Those pipelines that are not covered and which also do not provide third party access are not subject to any form of economic regulation once exempted by the scheme administrator.

The relevant scheme administrator determines whether exemptions to Part 23 apply.⁶¹⁸ Decisions of the AER as scheme administrator under the NGL are subject to judicial review under the ADJR Act, but not merits review.⁶¹⁹ Decisions of the ERA as scheme administrator under NGL (WA) are subject to judicial review by the Western Australia Supreme Court.⁶²⁰

⁶¹⁵ Rules 8, 35 and 39 of the NGR.

⁶¹⁶ The *Competition and Consumer Amendment (Abolition of Limited Merits Review) Act 2017* removed merits review of decisions under the NGL, which includes NCC decisions.

⁶¹⁷ GMRG, Explanatory note: Gas Pipeline Information Disclosure and Arbitration Framework - Initial National Gas Rules, p.46.

⁶¹⁸ Rule 585 of the NGR.

⁶¹⁹ The amendments made by the *Competition and Consumer Amendment (Abolition of Limited Merits Review) Act 2017* to the Competition and Consumer Act (CCA) remove merits review of AER decisions. Section 44ZZMAA of the CCA provides that there is to be no merits review of decisions under energy laws by the Tribunal. Section 44AIA further provides that a decision of the AER under a state or territory law or local energy instrument is not to be subject to merits review (however described) by a body established under a law of a state or territory. This additional provision prevents state jurisdictions from setting up their own state specific legislation and decision making bodies that can carry out merits review of AER decisions.

⁶²⁰ NGL (WA) is given effect by the *National Gas Access (WA) Act 2009*.

C.2.4 Greenfields pipelines

A service provider of a greenfields pipeline that is yet to be commissioned can apply to the NCC for a determination that exempts the pipeline from coverage for 15 years.⁶²¹ In a similar manner to coverage determinations, the NCC makes a recommendation to the relevant Minister, who makes the decision, based on the coverage criteria and the NGO. Such decisions are subject to judicial review, but not merits review.⁶²²

The effect of the decision is that the pipeline is not, and cannot, be sought to be a covered pipeline for the 15 year period. As a result, the pipeline is a non-scheme pipeline. Since 1 August 2017, these pipelines have been subject to regulation under Part 23 of the NGR (subject to any exemption granted by the scheme administrator).

To date, the NCC has made four such decisions:

- Comet Ridge to Walumbilla Pipeline Loop (2015)
- Gladstone Liquefied Natural Gas (2013)
- Australia Pacific Liquefied Natural Gas (2012)
- Queensland Curtis Liquefied Natural Gas (2010).

⁶²¹ Under s. 151 of the NGL.

⁶²² The amendments made by the *Competition and Consumer Amendment (Abolition of Limited Merits Review) Act 2017* to the Competition and Consumer Act remove merits review of Commonwealth Minister decisions but in theory, leave it open for each state to set up its own state specific legislation and decision making body to provide for merits review of decisions by state ministers, although no such process currently exists in any of the states.

D Options for amending the regulatory framework for pipelines

In Chapter 3, the Commission outlined issues with the existing framework for economic regulation of gas pipelines, and recommended that a review be undertaken in 2019 to consider possible changes to the framework to address these issues.

This appendix outlines and analyses two possible options for reform of the framework. It is intended that documenting the AEMC's thinking on this topic to date will be useful in informing the recommended 2019 review. The appendix details just two of many possible options which should be carefully considered by the AEMC and stakeholders.

Option 1 is the option described in the draft report, and is outlined in section D.1. Option 2 is an option that was not discussed in the draft report, although was raised by the AEMC at a workshop with stakeholders in December 2017. It shares some similarities with recommendations made by the ACCC in its 2016 inquiry, most notably that the coverage criteria be changed to directly assess pipeline market power.⁶²³ Option 2 is discussed in section D.2.

An analysis of the options is provided in section D.3.

D.1 Option 1: reorder existing tests within the framework

Option 1 involves retaining the wording of the coverage determination,⁶²⁴ while changing:

- the pipelines to which the test is applied, so that it is only applied to those pipelines that are likely to engage in denial of access
- the outcomes of the test, so that it determines whether regulation should be applied (at all) in those circumstances.

Chronologically, the first step is to ask whether a pipeline provides third party access. If not, the existing coverage criteria would be applied to assess whether this pipeline is denying access, unless the pipeline has been awarded a greenfields 15-year no-coverage exemption from coverage. If not covered, no regulation would be applied, consistent with the current arrangements where pipelines which are not covered and also do not provide third party access are not subject to any form of economic regulation.

If a pipeline does not provide third party access but is found to deny access, or if a pipeline does provide third party access, the next step would be to determine which form of regulation should apply. This would be determined through a test analogous to the existing light regulation determination (that is, based on the form of regulation factors, the relative cost of regulation and the NGO). However, the potential outcomes would be full regulation, light regulation (both amended as recommended by this report) and the access regime under Part 23 of the NGR.

The exemption regime within Part 23 could then be applied to those pipelines determined to be subject to Part 23, although the exemption for pipelines that do not

⁶²³ ACCC, *Inquiry into the east coast gas market*, April 2016, recommendation 3, p. 20.

⁶²⁴ Alternatively, there could be alignment with the declaration criteria in the national access regime.

provide third party access would be removed from this stage, because whether a pipeline already provides third party access has already been determined in the first step.

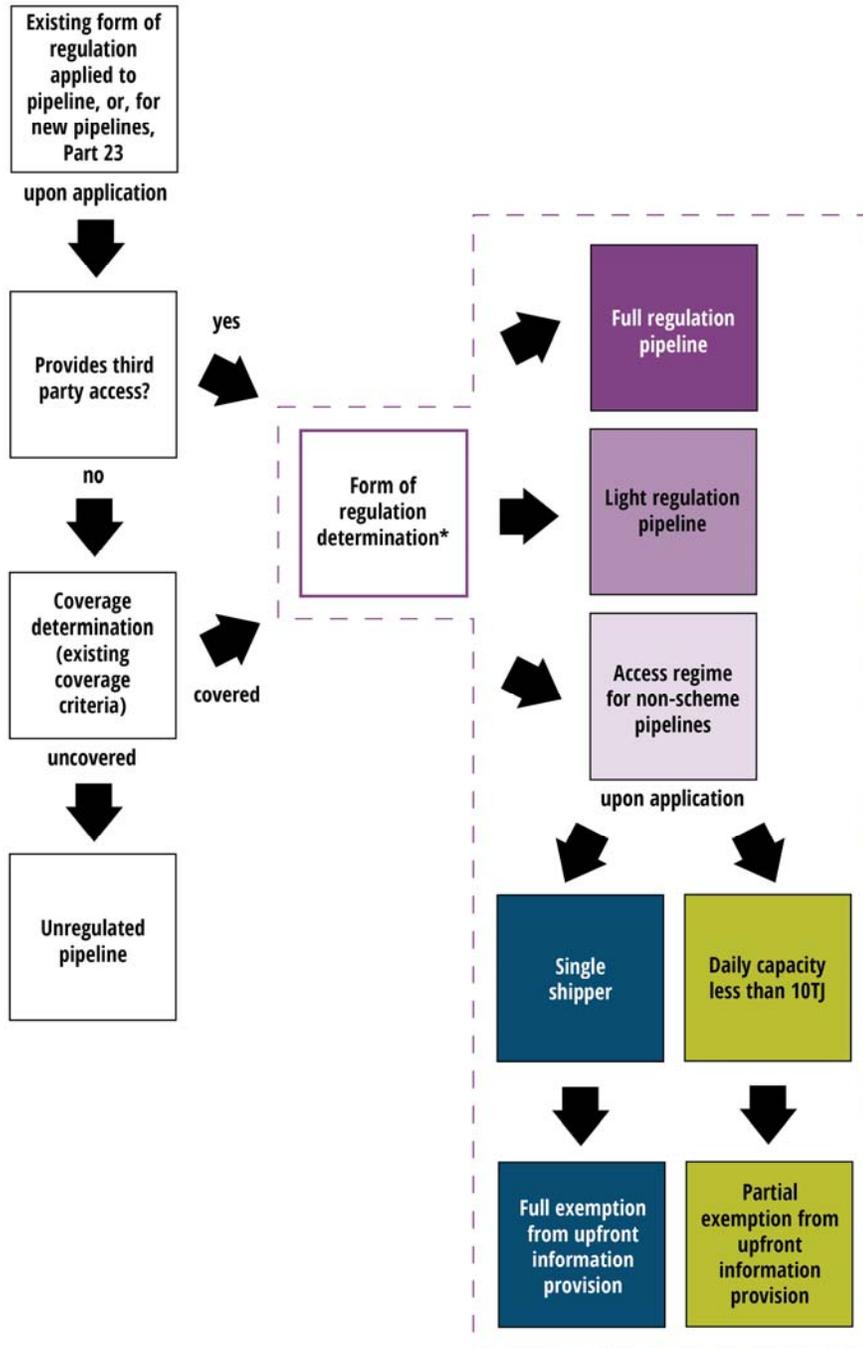
The governance of the test could be the same as the current light regulation determination (an NCC decision). Alternatively, the decision could be made by the relevant minister on the advice of the NCC. As now, an assessment of a particular pipeline would only be carried out upon application, with the status quo form of regulation remaining in effect until that time.

The form of regulation factors and other criteria on which the NCC (or relevant minister) would make its decision would remain unchanged. These appear to be appropriate criteria on which to determine which form of regulation should apply. The exception to this is the case where a pipeline has been granted a 15-year no-coverage determination (and provides third party access), in which case Part 23 would be applied, as is the case now. This is to avoid the possibility of pipelines that have been granted a coverage exemption - and hence an exemption from full or light regulation - having these forms of regulation applied to them.

To address any concerns that the NCC is not adequately informed of stakeholder views in making its determinations or recommendations to ministers, changes could be made to the level of stakeholder engagement that the NCC undertakes. Consideration could also be given as to whether initiating a test and contributing evidence to a test is accessible and low cost for shippers and other interested parties.

The option 1 framework would apply to both distribution and transmission pipelines. Although clearly, the form of regulation which is applied may differ between pipelines, or between distribution and transmission pipelines, as a consequence of the outcomes of the framework. This is because the assessment required is focussed on the relevant form of regulation for a particular pipeline in its particular circumstances. This option is outlined in figure D.1 below.

Figure D.1 Overview of option 1



* Existing factors from light regulation determination (form of regulation factors, relative cost, NGO)

Note that figure E.1 is not intended to be an exhaustive representation of the option. For example, a pipeline may also be able to be covered if deemed a covered pipeline when the code came into effect, developed through an approved competitive tender process (s. 126 of the NGL) or if the service provider submits a voluntary access arrangement to the regulator (s. 127 of the NGL). Furthermore, applications could be made for tests to be reapplied so that over time, pipelines could move between forms of regulation.

D.2 Option 2: changing the coverage criteria

Option 2 involves changing the coverage determination so that it used to directly determine if a service provider has significant and enduring market power in relation to a pipeline. Depending on the outcome of the new test:

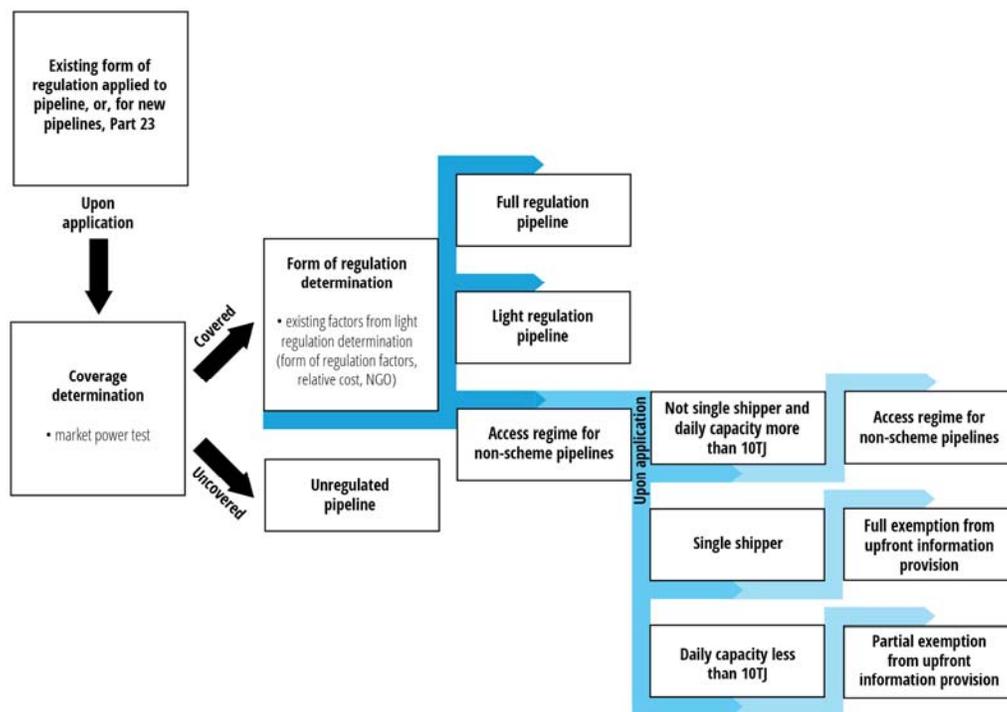
- Pipelines that are determined to be covered would then be subject to a form of regulation determination which would determine the appropriate form of regulation between full regulation, light regulation (both amended consistent with the recommendations of this review), and the access regime for non-scheme pipelines.
- The exemption regime for small and single user pipelines within Part 23 could then be applied to those pipelines determined to be subject to Part 23. The exemption for pipelines that do not provide third party access would be removed because the assessment is incorporated in the new coverage criteria and does not require revisiting in a subsequent step. The existing exemption applies in those instances where a pipeline is not covered (and hence has not been deemed to be denying access) and by definition is not monopoly pricing because it is not providing third party access. Under option 2, all pipelines subject to Part 23 are covered based on a finding of market power and so the exemption is redundant.
- Pipelines that are determined not to be covered because there is no (or insufficient) market power would not be subject to any form of regulation.

As with option 1:

- the same framework would apply to both distribution and transmission pipelines
- improvements could be made to the processes surrounding each of these tests, including the level of stakeholder engagement undertaken by the NCC
- tests would only be applied upon application, with the status quo form of regulation remaining in effect until a decision is made to change it.

Option 2 is outlined in figure D.2.

Figure D.2 Overview of option 2



As with figure D.1, figure D.2 is not intended to be an exhaustive representation of the option.

Given the pivotal importance of the coverage determination in the framework, careful consideration of the coverage criteria would be required for this option. The aim would be that regulation is applied when (and only when) it is appropriate, in consideration of the costs and benefits, and the NGO. Consistent with the ACCC's recommendation 3 in its inquiry, such a test should assess whether a service provider has substantial and enduring market power in relation to a pipeline, in order to address both market failures of denial of access and monopoly pricing.⁶²⁵

In many respects the altered coverage determination may look similar to the existing light regulation determination, which considers among other things the form of regulation factors (which in effect attempt to assess the extent of market power on a pipeline), the likely relative costs of the forms of regulation, and the NGO. However, notable differences between the coverage determination and the form of regulation determination under this option would be:

- Consistent with the regime prior to the introduction of Part 23, the coverage determination would determine whether regulation applies at all while the form of regulation determination would determine which form of regulation applies.

⁶²⁵ ACCC, *Inquiry into the east coast gas market*, April 2016, recommendation 3, p. 20.

- The governance of the tests would differ: the coverage determination would be undertaken by the relevant Minister (on the advice of the NCC), while the form of regulation determination would be undertaken directly by the NCC.

Pipelines which have been granted a greenfields 15-year no-coverage determination would not be covered and hence would not be economically regulated. This is because under option 2, the Part 23 form of regulation falls under the 'covered' pipeline category. Those with a greenfields 15-year no-coverage determination would have the benefit of no regulation as originally provided by the greenfields pipelines incentive framework.

D.3 Analysis of options

D.3.1 Benefits of options

Both options address an issued raised in section 3.4 - that the coverage determination is not suitable for determining which form of regulation applies. Under both options, the form of regulation determination would be used to determine which form of regulation applies, rather than the coverage determination. This reduces the prospect of an inappropriate form of regulation being applied on a case-by-case basis. In turn, the prospect of under- or over-regulation is reduced for the pipelines under either approach. This reduces the likelihood of inefficient use of market power in the case of under-regulation, and inefficient regulatory burden and market distortions in the case of over-regulation.

The NCC noted that reordering the tests under option 1 would reduce the pre-eminence of the coverage determination and could result in full regulation being imposed with all of its attendant costs, without a robust assessment of the economically important considerations raised by the coverage criteria. As noted in section 3.4, the Commission does not consider that the coverage criteria are fit for purpose in considering what form of regulation should apply to a pipeline. This is because the coverage criteria do not take into account all the possible market failures that may arise in relation to the operation of a pipeline. Instead, the form of regulation determination would be designed to assess the economically important considerations in determining which form of regulation to apply.

Other benefits of the options include:

- under option 1 the coverage criteria could be more closely aligned to those of the declaration criteria of the national access regime without exacerbating the risk of under-regulation, as discussed in section 3.4
- option 2 reintroduces many of the governance arrangements in place prior the introduction of Part 23. An accountable minister would determine whether regulation should apply (at all), while the NCC would then determine which form of regulation applies in those cases the minister has determined that regulation is appropriate.

PIAC supported option 1 or changes to the coverage criteria to reflect the monopoly pricing market failure that it considers pipeline regulation should address.⁶²⁶ The

⁶²⁶ PIAC, submission to the draft report, p. 6.

EUAA and MEU also suggested that the coverage criteria be changed to that recommended by the ACCC. Having said this, it is not clear that these parties support other changes associated with option 2, most notably the reintroduction of the prospect of no regulation for uncovered pipelines which provide third party access.

D.3.2 Costs and potential transitional arrangements

The Commission acknowledges an issue raised by the NCC in relation to both options that it may be challenging for the NCC or relevant Minister to make a granular assessment of the extent of market power of a pipeline and determine between three forms of regulation.⁶²⁷ Consideration could be given as to whether further alignment of Part 23 and light regulation is appropriate, in addition to those recommended as part of this review. This might be considered as part of the scheduled review of Part 23 in 2019, as discussed in section 3.4.

The governance of option 1 would need careful consideration. Were the NCC to make the form of regulation determination, it is possible that the NCC would be able to apply full or light regulation to pipelines that had not been subject to a coverage determination. As noted by the NCC, this may be considered undesirable - under both the existing arrangements and those in place prior to the introduction of the access regime for non-scheme pipelines, a ministerial decision is required to cover a pipeline.⁶²⁸

Alternatively, the relevant minister could make the form of regulation determination, on the advice of the NCC. However, this is inconsistent with the existing and previous arrangements for the relatively focussed administrative decision of a light regulation determination to be taken directly by the NCC when the question of whether to regulate has already been made.

Costs and transitional arrangements would have to be carefully considered for both options. One approach could be to assess all existing pipelines under the new framework once implemented. However, a potentially more practical solution that avoids the assessment of many pipelines upon making the changes to the framework would be to continue to apply the existing form of regulation for each pipeline until a coverage determination or form of regulation determination is sought. This would reduce the total workload and may mean that the NCC is only required to make a small number of decisions regarding existing pipelines. To manage the regulatory burden further, the existing arrangement where new pipelines are by default regulated under Part 23 of the NGR could be retained rather than having an assessment carried out for each new pipeline. As a result, decisions regarding the form of regulation would only have to be made for new pipelines upon application.

D.3.3 Other considerations

As is currently the case, under option 1 no regulation would only apply in circumstances where the pipeline does not meet the coverage criteria and does not provide third party access. If the pipeline provides third party access then some form of

⁶²⁷ NCC, submission to the draft report, p. 12.

⁶²⁸ NCC, submission to the draft report, pp. 13-14.

regulation is applied, including if a greenfields 15-year no-coverage determination is in place. That is, option 1 does not reintroduce the prospect of no regulation applying in circumstances where this is not currently possible.

In contrast, option 2 reintroduces:

- the prospect of no regulation for pipelines that provide third party access, depending on the outcomes of the revised coverage determination
- the guarantee of no economic regulation for pipelines granted a greenfields 15-year no-coverage determination for the period of time that the exemption applies.

There are risks associated with either of these approaches. Option 1 risks the prospect of individual pipelines which do not have market power being regulated (with the associated direct and indirect costs) despite there being little or no benefit. Furthermore, as noted by the NCC, applying economic regulation under Part 23 to those pipelines that have been granted a greenfields 15-year no-coverage determination may risk regulatory over-reach, and may distort investment incentives for new pipelines.⁶²⁹

On the other hand, if the coverage determination in option 2 is mis-designed or mis-applied, the coverage determination could once again introduce a situation where no regulation is applied to pipelines which provide third party access despite the fact that regulation is appropriate. It would undo the deliberate steps the COAG Energy Council took on the advice of Dr Vertigan to introduce the access regime for all non-scheme pipelines, in the face of the ACCC's findings of "pervasive" monopoly pricing being undertaken by transmission pipeline service providers.⁶³⁰

Careful consideration of these trade-offs would be required in the recommended 2019 review of the framework (see recommendation 1).

Finally, as noted by the NCC the effect of both options would be to further distance the regime from the approach to infrastructure regulation established in Part IIIA of the Competition and Consumer Act. This is an outcome not supported by the NCC.⁶³¹ There has historically been a relatively high degree of consistency between the national access regime under Part IIIA of the Competition and Consumer Act and the gas access regime, although more recently the level of consistency has dropped, with the introduction of the access regime for non-scheme pipelines and changes to the declaration criteria in Part IIIA.⁶³²

The Commission acknowledges that consistency with the national access regime is desirable in that it reduces costs and complexities. However, consistency should not be forced at the expense of a regime that is fit for purpose for the gas sector and consistent with the NGO. It is important to reflect on the significant changes that have occurred in the sector in the 20 years since the coverage criteria were first developed and consider the future needs of the economy.

⁶²⁹ NCC, submission to draft report, pp. 20-21.

⁶³⁰ ACCC, *Inquiry into the east coast gas market*, April 2016, p. 121.

⁶³¹ NCC, submission to the draft report, p. 13.

⁶³² Competition and Consumer Amendment (Competition Policy Review) Act 2017.

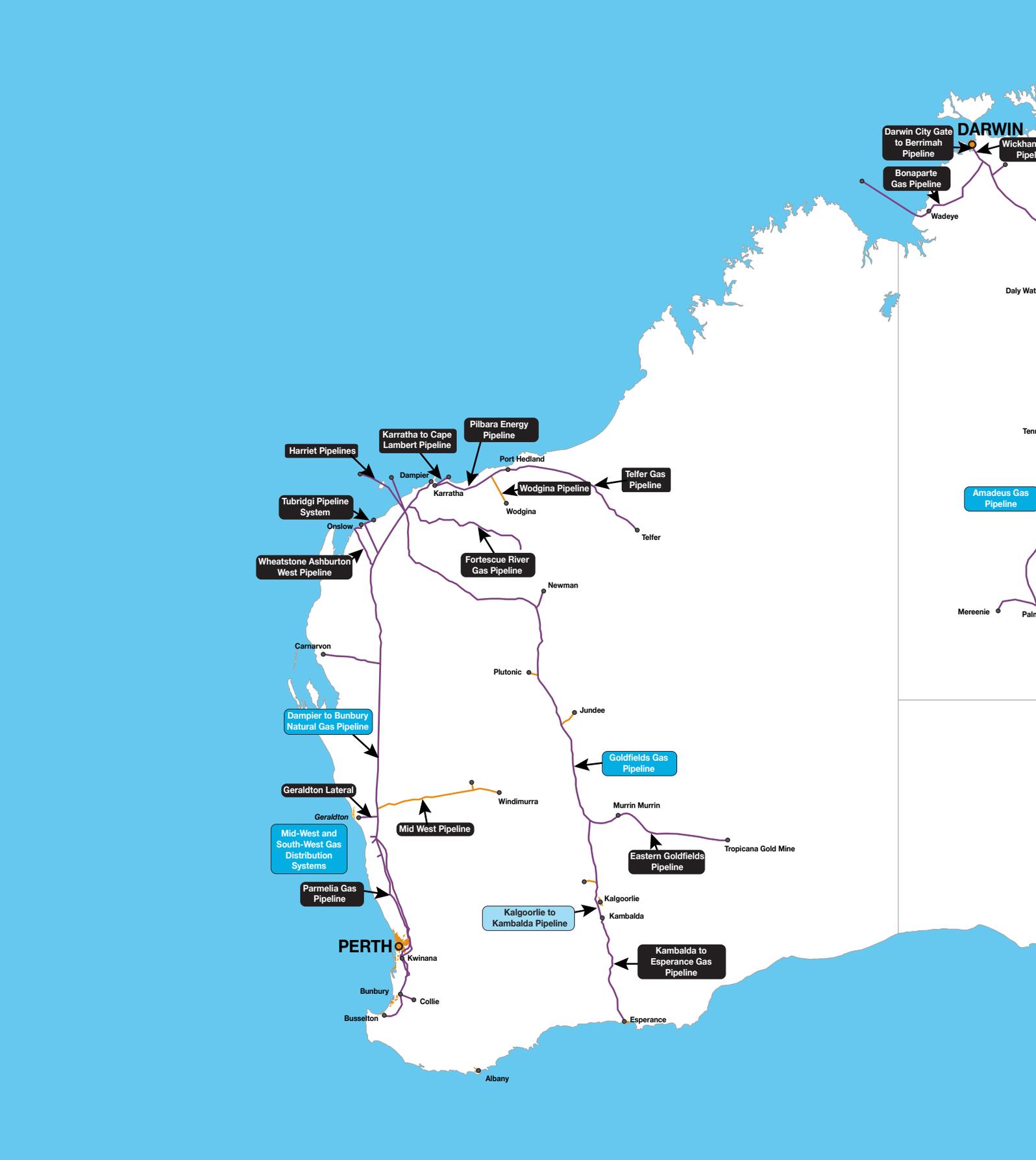
D.3.4 Summary of analysis

A summary of the analysis above is provided in table D.1.

Table D.1 Summary of analysis of options for framework

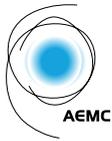
Topic	Option 1	Option 2
Suitable test for determining which form of regulation applies	Yes	Yes
Prospect of re-introducing no regulation where regulation must currently apply	No, with the possibility of over-regulation as a result	Yes, including to pipelines granted a greenfields 15-year no-coverage determination, with the possibility of under-regulation if tests are mis-designed or mis-applied
Governance consistent with that prior to introduction of Part 23	No	Greater degree of consistency than status quo
Challenge for NCC/Minister of determining appropriate form of regulation from three choices	Yes	Yes
Transitional considerations	To be considered	To be considered
Consistency with national access regime	Improved consistency of coverage criteria with national access regime declaration criteria may be appropriate, although other inconsistency remain.	Largely inconsistent with national access regime.

E Map of transmission and distribution gas pipelines in Australia



LEGEND

- Transmission pipelines
- Proposed transmission pipelines
- Distribution pipelines
- Full regulation pipeline
- Light regulation pipeline



The information contained in this document, including the pipeline names and locations, has been prepared by the Australian Energy Market Commission (AEMC) as general guidance and for information purposes only. The information is based on publicly available sources, and has not been independently verified by the AEMC, and therefore, may not be complete, accurate or up to date.

F Terms of reference

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

Dear Mr  Pierce

You would be aware that the Australian Competition and Consumer Commission (ACCC) East Coast Gas Inquiry report released in April 2016 made a suite of recommendations including:

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

Energy Ministers released a consolidated response to both the AEMC Review and the ACCC Inquiry in August 2016 committing to implement a comprehensive package of reforms. In particular, the Energy Council agreed to task the AEMC to review parts 8-12 of the NGR in line with the ACCC's recommendations.

Accordingly, I am writing to you in my capacity as Chair of the Energy Council, requesting the AEMC to undertake a review into the scope of economic regulation applied to covered pipelines, as per the attached Terms of Reference. I request that the review commence no later than May 2017 and a draft report be released by February 2018, with publication of a final report by June 2018.

I encourage you to collaborate with the Gas Market Reform Group to ensure that the review considers the concurrent work on the development of the gas pipeline information disclosure and arbitration framework and the transportation capacity trading reforms.

Sincerely



The Hon Josh Frydenberg MP
Chair
COAG Energy Council
May 2017

Encl.

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TERMS OF REFERENCE

Australian Energy Market Commission

Review into the scope of economic regulation applied to covered pipelines

Background

- Under the National Gas Law (NGL), natural gas pipelines may be subject to different levels of economic regulation: Light regulation: a negotiate-arbitrate model that focusses on commercial negotiation and information disclosure, supported by a dispute resolution process.
- Full regulation: the Australian Energy Regulator (AER) approves a full access arrangement for the pipeline, which sets out the terms and conditions (including prices) for 'reference services', which under the National Gas Rules (NGR) are services that are sought by a significant part of the market. The negotiate-arbitrate model and dispute resolution framework also apply to reference and non-reference services offered by way of pipelines subject to full regulation.

The National Competition Council (NCC) may make a recommendation whether or not a pipeline should be "covered" (i.e. subject to full economic regulation) and the relevant Minister makes a decision on this recommendation.

The NCC may determine that a pipeline should be subject to full or light regulation. In forming a view as to whether a pipeline should be subject to full or light regulation, the NCC has regard to (amongst other things) the 'form of regulation factors' set out in the NGL, which are indicators of the extent of market power a pipeline service provider can exercise.

Parts 8-12 of the NGR govern the economic regulation of pipelines subject to full and light regulation:

- Part 8 sets out the requirements for pipelines subject to full regulation to provide access arrangements (and pipelines subject to light regulation to provide limited access arrangements).
- Part 9 applies to full access arrangements and sets out how prices and revenue are determined (i.e. the building block approach).
- Part 10 includes other provisions relating to access arrangements, such as extension and expansion requirements.

- Part 11 provides that the applicable access arrangement and other information must be made available to prospective pipeline users and sets out the process for parties to seek access to pipeline services.
- Part 12 sets out certain requirements for the resolution of access disputes (the process for dealing with access disputes is additionally set out in Chapter 6 of the NGL).

In April 2016, the Australian Competition & Consumer Commission (ACCC) provided the Australian Government with its report on its inquiry into the east coast gas market.¹ The ACCC's inquiry examined the competitiveness of wholesale gas prices and the structure of the upstream, processing, transportation, storage and marketing segments of the east coast gas industry.

The ACCC's report included a number of recommendations to the Council of Australian Governments (COAG) Energy Council (the Council) to address issues it had identified that related to the exercise of market power by gas transmission pipeline service providers, to the detriment of consumers and economic efficiency.

Of particular relevance to these terms of reference, the ACCC raised concerns that:

1. even if a pipeline is fully regulated, the service provider of that pipeline may still be able to exercise market power to the detriment of consumers and economic efficiency; and
2. the dispute resolution framework may not be providing an effective constraint on the behaviour of pipeline service providers.

Specifically, the ACCC identified the following potential issues with the current economic regulatory framework:

1. Reference services: the current definition of 'reference service' is that the service is sought by a 'significant part of the market'. As a result, some non-contestable services are not subject to regulated terms and conditions (including prices). The ACCC suggested that pipeline owners may be able to exercise market power on these services to the detriment of consumers and economic efficiency.
2. Pipeline expansions: when a pipeline that is subject to full regulation is expanded (for example, through the addition of a compressor), the additional capacity is not necessarily included within the definition of the covered pipeline and consequently not subject to economic regulation. Again, the ACCC noted that pipeline owners may,

¹ ACCC, *Inquiry into the east coast gas market*, April 2016

as a result, be able to exercise market power on these services provided by the expansion to the detriment of consumers and economic efficiency.

3. Information and dispute resolution: there may be barriers that are preventing participants from using the access dispute resolution provisions in the NGR. As a result, the ACCC commented that the threat of arbitration was unlikely to be a constraint on the behaviour of pipeline service providers.

While the ACCC identified the above potential issues with Parts 8-12 of the NGR in its report, it was not the focus of the ACCC inquiry to carry out a comprehensive assessment of Parts 8-12 of the NGR. Therefore there may be other related issues with Parts 8-12 that were not identified by the ACCC.

Energy Ministers released a consolidated response to both the AEMC Review and the ACCC Inquiry in August 2016 committing to implement a package of comprehensive reforms that address the priority areas of gas supply, market operation, gas transportation and market transparency. In particular, the Energy Council agreed to task the AEMC to review parts 8-12 of the NGR in line with the ACCC's recommendations.

In December 2016, the Council agreed to the development of an Arbitration Framework designed to address the negotiation imbalance between pipeline customers and operators by providing for binding arbitration where commercial negotiations fail.

Purpose

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

The AEMC should also consider whether the access dispute resolution mechanism set out in the NGL and NGR should be amended to provide a more effective constraint on the exercise of market power by pipeline service providers, including making dispute resolution more accessible to shippers.

The AEMC should examine the issues identified by the ACCC in its inquiry in relation to Parts 8-12 of the NGR, as well as any other related issues identified by the AEMC, including through stakeholder consultation.

The AEMC is requested to work closely with the GMRG to ensure consistency with all future gas market reform measures and avoid duplication of efforts, particularly in relation to the development of a framework for binding arbitration.

In carrying out this review, the AEMC should have regard to the National Gas Objective, the form of regulation factors and also consider the Council's Vision for Australia's future gas market.

Scope

The review is to focus on transmission pipelines. However, the review will need to consider the implications of any recommendations on distribution pipelines. For example, if the definition of a 'reference service' is changed to address an issue related to transmission pipelines, the AEMC should consider the impacts on, and suitability of that change for, distribution pipelines.

Once a decision has been made that a service is a reference service, the 'building block' approach in Part 9 of the NGR is used to determine regulated prices and revenue. The appropriateness or otherwise of using the building block methodology to determine regulated prices and revenue in respect of reference services are outside the scope of this review. However, it may be necessary for the AEMC to consider consequential changes to the building block methodology in Part 9 as a result of recommendations related to other chapters. For example, if changes are made to the pipeline capacity expansion provisions, the AEMC should consider any implications for the 'new capital expenditure criteria' in Part 9.

Consultation, timeframes and deliverables

The AEMC should carry out the review through a consultative process with jurisdictions, industry members, consumer groups and energy market bodies.

The AEMC is to publish an issues paper in the first half of 2017 and draft report for consultation in early 2018, with a final report and recommendations provided to the Council by June 2018.

Milestone	Timeframe
Terms of reference received	May 2017
Issues paper for consultation	June 2017
Draft report for consultation	February 2018
Final report to COAG Energy Council	June 2018

5 May 2017