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Australian Energy Market Commission

## ISSUES PAPER

Review into the scope of economic regulation  
applied to covered pipelines

27 June 2017

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REVIEW



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Reference: GPR0004

## **Citation**

AEMC, Review into the scope of economic regulation applied to covered pipelines, Issues Paper, 27 June 2017

## **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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# 1 Introduction

Australia's gas markets are in a period of significant change. Conventional gas reserves are declining, unconventional gas production is increasing, linkages between domestic energy markets including electricity are gaining more relevance, and the natural gas export industry is becoming a source of significant international revenues. The ability to efficiently transport gas from sources to consumers is key to making gas available across the economy.

On 19 August 2016, in response to reports from the Australian Competition & Consumer Commission (ACCC) and the Australian Energy Market Commission (AEMC or Commission), the COAG Energy Council published a gas market reform package. One of the published reform measures was for the AEMC to review Parts 8 to 12 of the National Gas Rules (NGR).

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 gas pipelines. The terms of reference request the AEMC to:

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

Parts 8 to 12 of the NGR set out how a covered gas pipeline is to be regulated.<sup>1</sup> These parts provide rules in relation to the access arrangement process and information framework, calculation of revenue and prices, non-price terms and conditions of access, and arbitration framework, as follows:

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

Further information on each of these parts is provided in Chapter 5 of this paper.

This issues paper has been prepared to facilitate public consultation on the review, and to seek stakeholder submissions. The paper:

- sets out a summary of, and a background to, the review

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<sup>1</sup> A covered gas pipeline is a pipeline that is covered under the NGL and NGR.



- outlines the policy objectives of the gas access regime and regulatory framework for gas pipelines
- identifies a number of questions and issues to facilitate stakeholder consultation
- outlines the process for making submissions.

This review will cover both gas transmission and distribution pipelines, which are subject to economic regulation by either the Australian Energy Regulator (AER) or Economic Regulation Authority of Western Australia (ERA).<sup>2</sup>

The AEMC will engage with the ACCC, AER, ERA and Gas Market Reform Group (GMRG) throughout the review period.

Submissions are invited from stakeholders on the issues noted in this paper, and any other issue related to the economic regulation of gas pipelines in Australia.

Stakeholders are requested to lodge submissions by 22 August 2017.

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<sup>2</sup> The *National Gas Access (WA) Act 2009* provides that "a reference to the AER is to be read as a reference to the regulator (whether the ERA or the AER)". This issues paper will refer to AER and ERA as "regulator" and will use the terms "AER" or "ERA" for statements that are only applicable to AER or ERA.



## 2 Background

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
- Amendments to Chapter 6 of the National Gas Law (NGL) to establish a framework for information provision and arbitration for non-scheme pipelines<sup>3</sup>
- GMRG's development of Dr Vertigan's recommended information disclosure and arbitration framework for non-scheme pipelines.

A summary of each is set out below.

### 2.1 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:<sup>4</sup>

- 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

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<sup>3</sup> Non-scheme pipelines are pipelines that are not covered by the NGL and the NGR.

<sup>4</sup> COAG Energy Council, Communiqué 11 December 2014, item 5.



- 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:<sup>5</sup>

- likelihood for the short term trading market (STTM) hubs to deliver 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
- 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.<sup>6</sup> 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 Gas Market Reform Group or GMRG) to develop the required package of changes.

The AEMC East coast wholesale gas market and pipeline frameworks review will inform this review in relation to:

- capacity trading and queuing requirements
- operation and administration of the capacity trading platforms and auctions.

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<sup>5</sup> AEMC, *East coast wholesale gas market and pipeline frameworks review*, stage 1 final report, 23 July 2015.

<sup>6</sup> AEMC, *East coast wholesale gas market and pipeline frameworks review*, stage 2 final report, 23 May 2016.



## 2.2 Review of the Victorian declared wholesale gas market

The AEMC is also undertaking a review of the Victorian declared wholesale gas market (DWGM review). The DWGM review is pursuant to terms of reference issued by the Victorian Government on 4 March 2015.<sup>7</sup> Some of the issues explored as part of the DWGM review are relevant to this review, particularly in relation to incentives to invest in expanding the Victorian Declared Transmission System (DTS).

## 2.3 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”.<sup>8</sup>

The ACCC used its information gathering powers under Part VIIA of the *Competition and Consumer Act 2010 (Cth)* (CCA) 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:

- 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:<sup>9</sup>

- 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

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<sup>7</sup> AEMC, *Review of the Victorian declared wholesale market, final report*, 14 October 2016.

<sup>8</sup> ACCC, *Inquiry into the east coast gas market*, April 2016, Appendix 2.

<sup>9</sup> *ibid.*, p. 18.



- 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.<sup>10</sup>

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.<sup>11</sup>

## 2.4 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.<sup>12</sup> The COAG Energy Council accepted the AEMC's recommendation to form a dedicated gas reform group (Gas Market Reform Group or GMRG).

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

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<sup>10</sup> *ibid.*, p. 11.

<sup>11</sup> *ibid.*, p.20.

<sup>12</sup> COAG Energy Council, Meeting communique, 19 August 2016.



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."<sup>13</sup>

Dr Vertigan stated:<sup>14</sup>

"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
- 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 operator<sup>15</sup>
- 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

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<sup>13</sup>     ibid., p.1.

<sup>14</sup>     Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, 14 December 2016, p. 12.

<sup>15</sup>     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.



COAG Energy Council's Vision for the establishment of a liquid wholesale gas market that provides market signals for investment and supply.<sup>16</sup>

Recommendation 4 of the report was that the coverage test not be changed at this stage.<sup>17</sup> 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:<sup>18</sup>

- 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."<sup>19</sup>

## **2.5 Amendments to Chapter 6 of the NGL to establish a framework for information provision and arbitration for non-scheme pipelines**

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.<sup>20</sup> The National Gas (South Australia) (Pipelines Access - Arbitration) Amendment Bill (Bill) has passed both houses of the South Australian parliament.<sup>21</sup>

The Bill outlines a dispute resolution process for non-scheme pipelines<sup>22</sup> 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.<sup>23</sup> Some existing contractual rights of users are protected.<sup>24</sup> The Bill provides for the NGR to set out information disclosure and collection requirements, and provides for

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<sup>16</sup> *ibid.*, pp. 10-11.

<sup>17</sup> *ibid.*, p.16. Dr Vertigan did note that many stakeholders did not consider that the test constrained the behavior of pipeline service providers (*ibid.*, p.12).

<sup>18</sup> *ibid.*, pp. 13-17.

<sup>19</sup> *ibid.*, pp. 15-16.

<sup>20</sup> National Gas (South Australia) (Pipelines Access - Arbitration) Amendment Bill 2017.

<sup>21</sup> The bill passed the South Australian Legislative Council on 20 June 2017.

<sup>22</sup> A non-scheme pipeline is a pipeline that is not covered under the NGL and NGR.

<sup>23</sup> National Gas (South Australia) (Pipelines Access - Arbitration) Amendment Bill 2017, clause 216C.

<sup>24</sup> *ibid.*, clause 216 N.



the scheme administrator to be the AER.<sup>25</sup> The negotiate-arbitrate process set out in the Bill is as follows:<sup>26</sup>

- 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 appoints 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.

## **2.6 Gas pipeline information disclosure and arbitration framework**

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:<sup>27</sup>

- 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
- pricing and other principles: pricing principles based on cost of service provision, supplemented by other principles.

The options paper stated that the final design would be presented to the Standing Committee of Officials for approval, after which the GMRG intend to develop rules for consideration by the COAG Energy Council in July 2017. Clause 294F of the Bill provides for the South Australian Minister to make the initial rules.<sup>28</sup>

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<sup>25</sup> *ibid.*, clause 216A.

<sup>26</sup> *ibid.*, clauses 216G-216V.

<sup>27</sup> GMRG, *Gas pipeline information disclosure and arbitration framework implementation options paper*, March 2017, p. xi

<sup>28</sup> *ibid.*, p. xiv.



On 5 June 2017, the GMRG published its final design recommendations on the information disclosure and arbitration framework. The overarching objective of the framework was described by the GMRG as:<sup>29</sup>

“The overarching objective of the new information disclosure and arbitration framework is to facilitate access on reasonable terms to services provided by non-scheme pipelines, which is taken to mean at prices and on terms and conditions that, so far as practical, reflect the outcomes that would occur in a workably competitive market.”

The GMRG's recommendations on the information disclosure requirements, arbitration mechanism and arbitration principles for non-scheme pipelines are described in sections 2.6.1 to 2.6.3 below.

The GMRG's recommendations, and the following NGR amendments, will be informative for this current review, particularly in relation to:

- efficiency of access arrangement process for full regulation pipelines
- access arrangement information requirements for full regulation pipelines
- light regulation regime
- arbitration framework for covered pipelines.

### **2.6.1 Non-scheme pipeline information disclosure**

The GMRG has recommended that non-scheme pipeline service providers be required to publish the following information on their websites:<sup>30</sup>

- Base level of information shippers require when considering whether to seek access, which is to include information on the pricing methodology and the inputs used to calculate the standing offers for each service offered by the pipeline
- Weighted average price paid for each service (published on an annual basis)
- Independently verified financial reports for each pipeline (prepared on an individual pipeline basis), and a breakdown of demand (by service). This information would be published on an annual basis four months after the end of the financial year and include information on the methods or principles the pipeline operator has used to determine the value of the assets, depreciation allowance and cost allocation.

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<sup>29</sup> GMRG, Gas pipeline information disclosure and arbitration framework final design recommendation, June 2017, p. 2.

<sup>30</sup> *ibid.*, pp. 6-11.



The GMRG has recommended that these information disclosure requirements be subject to a reporting standard and classified as civil penalty provisions.

## **2.6.2 Non-scheme pipeline arbitration mechanism**

The GMRG recommended that non-scheme pipelines be subject to an arbitration mechanism whose key design elements include:<sup>31</sup>

- Arbitration could be used to settle disputes in relation to all aspects of access to all types of pipeline services offered (excluding extensions).
- Arbitration would be 'on the papers' using information exchanged by parties in negotiations. The arbitrator would have the discretion to conduct hearings and request further information if required.
- If the dispute is price-related, the parties would be required to provide their final offers to the arbitrator and the respective offers would become the bounds of the arbitrator's determination.
- The AER, as scheme administrator of the arbitration mechanism, 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.
- Information on the existence of the arbitration would be published on the AER website.

## **2.6.3 Non-scheme pipeline arbitration principles**

The GMRG recommended that arbitration for non-scheme pipelines be subject to principles that are divided into three components: pricing principles; non-price principles; and other guiding principles.

The GMRG's recommended pricing principles are:<sup>32</sup>

- Firm transportation services, ancillary services and augmentations: When assessing the reasonableness of the offer for these types of services, the arbitrator is to have regard to the cost of providing the service. This is to include a commercial rate of return that reflects the risks the pipeline operator faces in providing the service. When determining the value of any assets used in the provision of the service, the arbitrator may have regard to any asset valuation techniques it considers are consistent with the workably competitive market objective, including those that take into account past recoveries of capital.

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<sup>31</sup>    ibid.

<sup>32</sup>    ibid.



- Derivative services: <sup>33</sup> When assessing the reasonableness of the offer for these services, the arbitrator is to have regard to 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.

For disputes related to non-price terms and conditions, the GMRG has recommended that the arbitrator take into account the principle that access be available on reasonable terms.

Other guiding principles that the GMRG recommended an arbitrator be required to consider are:

- the pipeline operator's legitimate business interests, and interests of other persons who have rights to use the service
- value to the providers of extensions including expansions of capacity whose cost is borne by someone else
- value to the provider of interconnections to the facility whose cost is borne by someone else
- operational and technical requirements necessary for the safe and reliable operation of the facility.

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<sup>33</sup> Derivative services are defined as services that utilise the capacity of the pipeline but are priced as a multiple of, or discount to, the firm transportation service. For example, park and loan services.



### 3 Assessment framework

This chapter lays out the Commission's assessment criteria that will guide this review.

#### 3.1 National gas objective

The national gas objective (NGO) is to:<sup>34</sup>

“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.”

In reviewing the economic regulation of gas pipelines, the Commission will consider the impact of the current provisions and of any recommendations to amend them on:

- efficient investment in gas transmission and distribution pipelines, and its promotion of efficiency in upstream and downstream markets
- efficient operation of gas transmission and distribution pipelines, and its promotion of efficiency in upstream and downstream markets
- the utilisation of pipelines by both upstream and downstream users
- gas transportation tariffs for both transmission and distribution pipelines
- non-tariff terms and conditions for gas transportation on both transmission and distribution pipelines.

The AEMC aims to engage the ACCC, AER, ERA, GMRG, in addition to pipeline service providers and all users of gas pipeline services in the review, including residential consumer representatives, industrial and commercial users, gas powered generators, LNG producers and retailers.

#### 3.2 Assessment criteria

The overarching objective of this review is to determine how the current framework could be improved to better meet the NGO. The Commission will assess 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.

While having regard to the NGO, the Commission will assess the economic regulation of gas pipelines with specific reference to the following criteria:

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<sup>34</sup> Section 23 of the NGL.



- do the rules provide for an efficient and effective regulatory framework that is consistent with the NGO?
- do the rules support efficient investment in gas transmission and distribution pipelines?
- how do the requirements under the rules affect the efficient operation and use of gas transmission and distribution pipelines?
- do the rules provide appropriate incentives to service providers to provide access to pipeline services for upstream and downstream users?
- do the requirements under the rules influence the tariff and non-tariff terms and conditions of access to pipeline services for the long term interests of gas consumers?

Each of these assessment criteria are expanded upon below.

In addition, the Commission will consider the implications of the information disclosure and arbitration framework for non-scheme pipelines that the GMRG has proposed on the gas pipeline access regime.

### **3.2.1 Efficient and effective regulatory framework**

The Commission will seek to confirm the purpose behind the gas pipeline regulatory regime. It will assess whether the framework for economic regulation of gas pipelines:

- provides incentives that are in line with the purpose of the framework
- delivers the policy objectives at least cost and in a timely manner.

### **3.2.2 Efficient investment in gas pipelines**

The impact of the gas pipeline economic regulation provisions on investment will be considered in relation to:

- investing in new gas transmission and distribution pipelines
- expansions to the capacity of transmission and distribution pipelines
- extensions to transmission and distribution pipelines
- any new gas transmission and distribution services.

### **3.2.3 Efficient operation and use of gas pipelines**

The Commission will assess how the requirements of and potential amendments to provisions governing the economic regulation of gas pipelines affect the operation of gas transmission and distribution pipelines, including:



- utilisation and trading of capacity
- extensions to gas pipelines
- performance indicators for gas pipelines.

#### **3.2.4 Incentives to provide access to pipeline services**

The Commission will assess whether the framework for economic regulation of gas pipelines offers appropriate incentives to service providers to provide access to pipeline services for upstream and downstream users, including:

- the purpose and definition of reference services
- implementation of the light regulation regime
- information disclosure requirements
- arbitration framework.

#### **3.2.5 Tariff and non-tariff terms and conditions of access**

The Commission will evaluate the approach to and efficiency of tariff setting, and the fairness and reasonableness of transportation agreement terms and conditions under the requirements of Parts 8 to 12, with a focus on:

- cost allocation and determination of total revenue and reference tariffs for pipelines
- tariff classes and charging parameters for distribution pipelines
- operation of tariff variation mechanisms
- determination of non-tariff terms and conditions.



## 4 Purpose of the gas pipeline regulatory regime

To assess the effectiveness of the regulatory provisions that govern access to covered gas pipelines, it is important to understand the objectives of the framework.

This review is the first wide ranging review of the economic regulation of natural gas pipelines since the introduction of the NGL in 2008. For this review to be able to successfully assess the current rule and consider any potential amendments, it is important to understand the background and historical context of the current arrangements and the outcomes of recent reviews.

The stated objectives of the current regulatory framework, and the recently stated policy objectives for gas reform and this review, are discussed in detail in this chapter.

### 4.1 Objectives of current regulatory framework

#### 4.1.1 Hilmer review and the introduction of the Code

On 25 August 1993, the national competition policy review (Hilmer review) found that introducing competition in some markets requires that competitors be able to obtain access to certain facilities that cannot be duplicated economically.<sup>35</sup> The Hilmer review recommended that a new legal regime be established under which firms could be given access to essential facilities on fair and reasonable terms.<sup>36</sup> The regime would operate by specific declaration applying to designated facilities, provide safeguards to the owner of the facility and to users, and apply to the limited category of cases in which:

- access to the facility was essential to permit effective competition in upstream and downstream markets
- the declaration was in the public interest having regard to the significance of the industry to the national economy and the expected impact of effective competition in that industry on national competitiveness.

The Hilmer review's recommended third party access regime became incorporated into Part IIIA of the *Trade Practice Act 1974 (Cth)*. Much of the principles were adopted by the 1997 Natural gas pipeline access agreement which established the National third party access code for natural gas pipelines (Code). The objective of the Code was to establish a framework for third party access to gas pipelines that:<sup>37</sup>

- facilitated the development and operation of a national market for natural gas

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<sup>35</sup> Hilmer, Rayner and Taperall, *National competition policy review*, 25 August 1993.

<sup>36</sup> The Hilmer review also made separate recommendations regarding monopoly pricing. Hilmer, Rayner and Taperall, *National competition policy review*, 25 August 1993, Chapter 12.

<sup>37</sup> *National third party access code for natural gas pipeline systems*, Introduction.



- prevented abuse of monopoly power
- promoted a competitive market for natural gas
- provided rights of access to natural gas pipelines on conditions that are fair and reasonable for both service providers and users
- provided for resolution of disputes.

The Code aimed to provide sufficient prescription so as to reduce the number of likely arbitrations, while incorporating enough flexibility for the parties to negotiate contracts within an appropriate framework. The main features of the Code were:<sup>38</sup>

- coverage: the mechanism by which transmission and distribution pipelines become subject to the Code
- access arrangement: up-front agreement that is modelled on the undertaking option under Part IIIA of the Trade Practices Act 1974,<sup>39</sup> and outlines services and tariffs that are applicable to a covered pipeline
- information disclosure requirements
- binding arbitration in case of an access dispute.

#### **4.1.2 Parer review and the introduction of the NGL**

On 8 June 2001, COAG commissioned an independent strategic review of medium to longer-term energy market directions (Parer review). The key recommendations of the Parer review report in relation to gas pipelines included:<sup>40</sup>

- introduction of binding up-front binding decisions on coverage of a new pipeline
- fifteen-year economic regulation free period for new transmission pipelines
- independent review of the gas access regime and the Code
- the development of minimum requirements for un-covered pipelines on trading pipeline capacity, ring fencing and the publication of prices.

On 13 June 2003, the Productivity Commission was requested to review the gas access regime. In its report, the Productivity Commission commented that the significant cost of the regime might be distorting investment.<sup>41</sup>

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<sup>38</sup> *ibid.*

<sup>39</sup> Now Part IIIA of the *Competition and Consumer Act 2010 (Cth)*.

<sup>40</sup> Parer, *Towards a truly national and efficient energy market*, 20 December 2002, pp. 55-56.

<sup>41</sup> Productivity Commission, *Review of the gas access regime*, 11 June 2004, p. xxii.



On 19 May 2006, the Ministerial Council on Energy endorsed a legislative package that included the National Gas Law (NGL) and National Gas Rules (NGR), which aligned with the Productivity Commission's recommendations as follows:

- Amending the test for coverage: The NGL included a set of coverage criteria that mirrored the declaration criteria in Part IIIA of the Trade Practices Act.
- Inclusion of a 15-year 'no coverage' option: The NGL included 15-year regulatory holiday option for greenfields pipelines under certain conditions.
- Replacing the principles for reference tariffs: The NGL included revenue and pricing principles to guide decisions.
- Establishing an expert review on setting an expected rate of return and the use of the capital asset pricing model:<sup>42</sup> The NGR provides greater guidance than the Code in relation to the determining an allowed rate of return for a full regulation pipeline.<sup>43</sup>
- Inclusion of a light handed monitoring option: The NGL included a light regulation regime that did not involve the upfront setting of reference tariffs but did make available binding arbitration. This was considered to be "particularly relevant for point to point transmission pipelines with a small number of users who have countervailing market power".<sup>44</sup>
- Sharpening the specification of the objectives of the regime: The NGL introduced an overarching objective, the NGO, to promote a focus on efficiency.

In the second reading speech for the NGL, the Minister stated that the legislation:<sup>45</sup>

"contains new incentives to encourage investment in gas infrastructure...These incentives include the continuation of the greenfields pipeline incentives, a new light handed regulatory regime and improvements to the rules around cost recovery for investment in expanding existing gas infrastructure capacity."

The purpose of the NGL is to establish a framework to ensure the efficient operation of pipeline services, efficient investment, and the effective regulation of gas networks.<sup>46</sup> This is reflected in the NGO and all decisions made under the regime are in reference to it.

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<sup>42</sup> The expert panel on energy access pricing submitted its report to the Ministerial Council on Energy on 13 April 2016.

<sup>43</sup> Changes were made to rules 9B, 72, 76, 87 and 87A by the AEMC in 2012. National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012 No. 3.

<sup>44</sup> National Gas (South Australia) Bill 2008, second reading speech, July 2008, p. 7.

<sup>45</sup> *ibid.*, p. 1.

<sup>46</sup> *ibid.*, p. 3.



## 4.2 Purpose of this review

In April 2016, the ACCC provided the Minister for Small Business and Assistant Treasurer with its report on its inquiry into the east coast gas market. The report identified the following gaps in the gas access regime:<sup>47</sup>

- current access regime is not imposing an effective constraint on transmission pipeline service providers engaging in monopoly pricing, including direct or indirect competition from new or existing pipelines, other energy sources or asset stranding risk
- current access regime allows pipelines that are subject to regulation to continue to engage in monopoly pricing, particularly on non-contestable services or services from uncovered expansions of the pipeline
- information asymmetries about the level of reserves, and commodity and transport prices are hindering efficient market responses and limiting the ability of shippers to identify any exercise of market power and to negotiate effectively with pipeline operators.

The ACCC also noted that the use of market demand to define the reference services to be included in an access arrangement that requires regulatory approval has "resulted in a number of non-contestable services being excluded from the AER's ex ante review, whereas non-contestable services are arguably a primary target for regulation".<sup>48</sup>

In December 2016, Dr Michael Vertigan provided COAG Energy Council with a report into the examination of the current test for regulation of gas pipelines. The report identified the following as issues with the gas access regime:

- pipeline owners have market power, which is exercised during negotiations of gas transport agreements
- pipeline operators have a superior negotiating position, and information asymmetry exists with pipeline customers
- 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 operator
- in some instances, the exercise of market power is resulting in inefficient outcomes and impeding the establishment of a liquid wholesale gas market.

In line with the ACCC's and Dr Vertigan's findings, the terms of reference for this review requests the AEMC to make recommendations on any amendments it considers

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<sup>47</sup> ACCC, *Inquiry into the east coast gas market*, April 2016, pp. 10-11.

<sup>48</sup> *ibid.*, pp. 134-135.



necessary to Parts 8 to 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.<sup>49</sup>

The terms of reference also specify that the AEMC should:

- consider whether the access dispute mechanism should be amended to address the exercise of pipeline market power and making dispute resolution more accessible to shippers
- examine the issues identified by the ACCC as well as other related issues identified through consultation
- work closely with the GMRG, particularly in relation to arbitration.

The AEMC will also have regard to any inconsistencies in regulatory oversight that are likely to arise from GMRG's development of an information provision and arbitration framework for non-scheme pipelines.

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<sup>49</sup> Review into the scope of economic regulation applied to covered pipelines, terms of reference, 5 May 2017, p. 3.

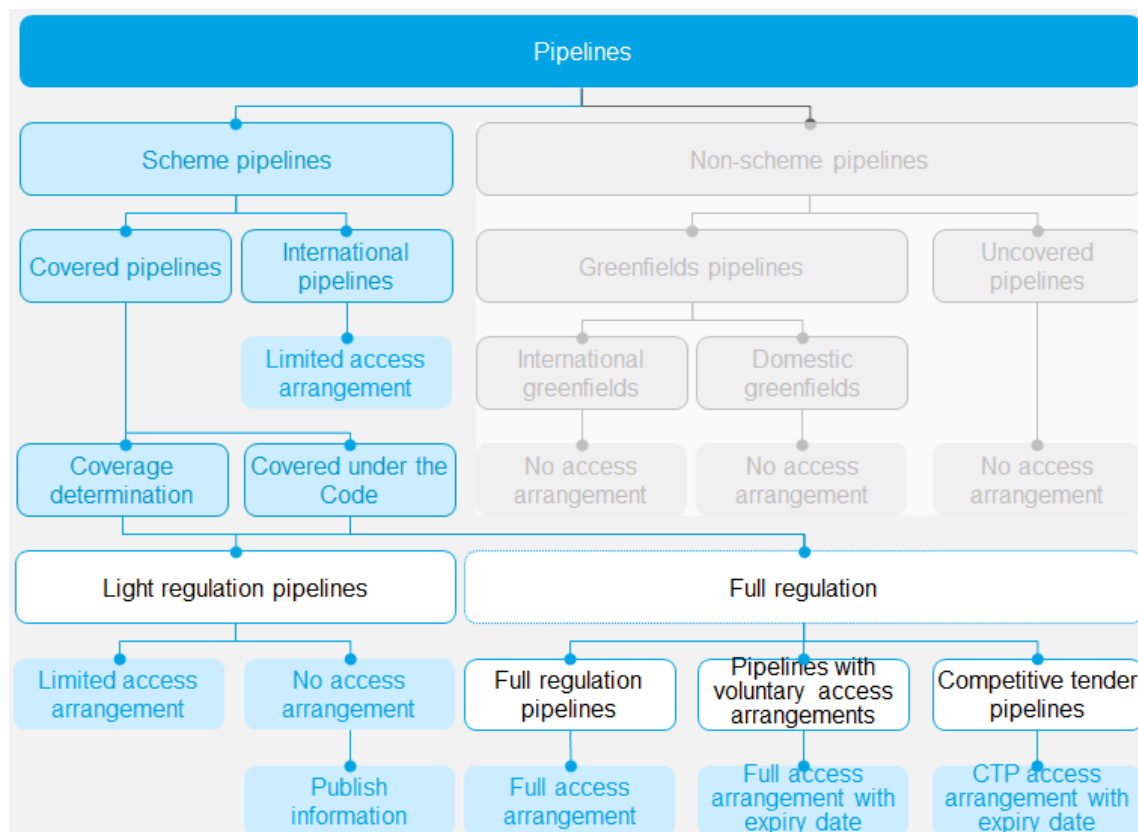


## 5 Current regulatory framework

This chapter discusses the provisions of Parts 8 to 12 in the NGR, in addition to related NGL provisions, which cover both transmission and distribution pipelines.

The below schematic diagram summarises pipelines and pipeline services under the NGL. Appendix A includes a map of transmission and distribution pipelines.

**Figure 5.1** Current regulatory classifications for pipelines



Source: AER, *Access arrangement guideline*, March 2009, p. 6

The current framework classifies pipelines as either scheme pipelines or non-scheme pipelines. Some scheme pipelines are covered pipelines because:

- they were covered pipelines under the Code
- the NCC has recommended, and the relevant minister has decided, that the pipeline is to be covered.

A covered pipeline can be a light regulation pipeline if:

- full regulation pipeline service provider submits an application to the NCC for a light regulation determination, and NCC approves the application; or



- NCC makes a light regulation determination at the same time as a coverage determination for a pipeline.

Under the current framework, covered full regulation pipelines are required to submit access arrangements that contain the tariff and non-tariff terms and conditions of access to one or more benchmark services (reference services). The NGL and NGR set out provisions to define reference services, and to determine the terms and conditions of third party access to available spare capacity on the pipeline. The NGL and NGR also set out related information disclosure and arbitration requirements.

The chapter is structured in line with Parts 8 to 12 as follows:

- 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.

## **5.1 Part 8: access arrangements**

Part 8 of the NGR covers access arrangements, and is divided into the following:

- Division 1: covers the level of the regulator's discretion in the decision making process
- Division 2: covers requirements to provide access arrangement information and management of such information
- Division 3: describes limited access arrangement requirements
- Division 4: describes full access arrangement submissions and requirements
- Division 5: covers submissions and revision dates, and revision proposal requirements
- Division 6: covers proposals for division or consolidation of access arrangements
- Division 7: sets out the procedure for limited access arrangement proposals
- Division 8: sets out the procedure for full access arrangement proposals from pre-submission to final decision
- Division 9: sets out the regulator's powers in the case where a service provider does not submit an access arrangement proposal
- Division 10: covers access arrangement variation proposals



- Division 11: covers the regulator's powers to vary or revoke access arrangements.

### 5.1.1 Overview of related legislation

Access arrangements have been carried over from the Code. Similar to the role of access undertakings under Part IIIA of the *Trade Practices Act 1974*, access arrangements are designed to set out the terms and conditions of access to the relevant pipeline.

Section 2 of the NGL defines a pipeline as,

“(a) a pipe or system of pipes for the haulage of natural gas, and any tanks, reservoirs, machinery or equipment directly attached to that pipe or system of pipes; or

(b) a proposed pipe or system of pipes for the haulage of natural gas, and any proposed tanks, reservoirs, machinery or equipment proposed to be directly attached to the proposed pipe or system of pipes; or

(c) a part of a pipe or system of pipes or proposed pipe or system of pipes referred to in paragraph (a) or (b),

but does not include –

(d) unless paragraph (e) applies, anything upstream of a prescribed exit flange on a pipeline conveying natural gas from a prescribed gas processing plant; or

(e) if a connection point upstream of an exit flange on such a pipeline is prescribed, anything upstream of that point; or

(f) a gathering system operated as part of an upstream producing operation; or

(g) any tanks, reservoirs, machinery or equipment used to remove or add components to or change natural gas (other than odourisation facilities) such as a gas processing plant; or

(h) anything downstream of a point on a pipeline from which a person takes natural gas for consumption purposes.”

Section 2 defines a scheme pipeline as,

“(a) a covered pipeline; or

(b) an international pipeline to which a price regulation exemption applies.”

Section 15 of the NGL defines coverage criteria for gas pipelines:



“(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.”

The coverage criteria mirror the current declaration criteria (a), (b) and (f) in Part IIIA of the Competition and Consumer Act 2010:<sup>50</sup>

“(a) that access (or increased access) to the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service;

(b) that it would be uneconomical for anyone to develop another facility to provide the service;...

(f) that access (or increased access) to the service would not be contrary to the public interest.”

The coverage criteria are intended to guide the National Competition Council's (NCC) recommendation to the relevant minister in relation to an application for a determination for:

- coverage of a pipeline
- revocation of coverage of a pipeline.

The NCC was established in 1995 by agreement of COAG.<sup>51</sup> The NCC's main function is to recommend on the regulation of third party access to services provided by monopoly infrastructure. Under the NGL, the NCC makes recommendations to relevant ministers on the coverage of gas pipelines and exemptions for greenfields gas pipelines. The NCC determines the form of regulation of gas pipelines (light or full regulation) and pipeline classification (transmission or distribution).

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<sup>50</sup> Section 44H of the Competition and Consumer Act. Schedule 12 of the Competition and Consumer Amendment (Competition Policy Review) Bill 2017, currently before the Australian Parliament, contains proposed amendments to the declaration criteria which, if passed, will lead to divergence.

<sup>51</sup> NCC website: [http://ncc.gov.au/about/about\\_us](http://ncc.gov.au/about/about_us)



Chapter 3, Part 2 of the NGL sets out light regulation of covered pipeline services. Section 122(1) of the NGL requires that, in deciding whether to make or revoke a light regulation determination, the NCC must consider:

- “(a) the likely effectiveness of the forms of regulation provided for under this Law and the Rules to regulate the provision of the pipeline services (the subject of the application) to promote access to pipeline services; and
- (b) the effect of the forms of regulation provided for under this Law and the Rules on –
  - (i) the likely costs that may be incurred by an efficient service provider; and
  - (ii) the likely costs that may be incurred by efficient users and efficient prospective users; and
  - (iii) the likely costs of end users.”

Section 122(2) of the NGL also provides that, in doing so, the NCC "must have regard to the form of regulation factors". The form of regulation factors, set out in s.16 of the NGL, are:

- “(a) the presence and extent of any barriers to entry in a market for pipeline services;
- (b) 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;
- (c) 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;
- (d) 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;
- (e) 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;
- (f) 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);
- (g) 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.”

A designated pipeline is a pipeline that must be fully regulated.<sup>52</sup> Section 2 of the NGL states that a designated pipeline is a pipeline that is classified by the regulations, or designated in the application act of a participating jurisdiction, as a designated pipeline. Under s. 11 of the South Australian Application Act, this decision can only be made once. Future regulations can only be made upon unanimous recommendation of ministers of participating jurisdictions. Section 125 of the NGL provides that COAG, or a designated service provider, may request a review of whether a pipeline should continue to be a designated pipeline. Such request would have regard to the NGO, and whether there has been a material change in competition in a market served by the designated pipeline. There have been no such reviews to date.

A greenfields pipeline is a new pipeline or major extension of an existing uncovered pipeline that has a 15-year regulatory holiday.<sup>53</sup> Sections 149 and 151 of the NGL state that if a greenfields pipeline project is proposed, or has commenced, then the service provider may apply to the NCC for a 15-year no-coverage recommendation to the relevant minister. A no-coverage determination exempts the pipeline from being a covered pipeline for 15 years. The following projects can apply for a no-coverage determination:<sup>54</sup>

- a pipeline that is structurally separate from any existing pipeline
- a major extension to an existing pipeline that is not a covered pipeline, or that is subject to light regulation if it has been granted an exemption
- an international pipeline that has been granted a price regulation exemption
- a major extension to a pipeline that does not satisfy one or more coverage criteria.

Rules 21 to 28 of the NGR provide for competitive tender pipelines. The regulator must approve a proposed tender process as a competitive tender process (CTP) if it is satisfied that the tender process is an appropriate mechanism for determining terms and conditions of access. The service provider must, at least six months before a CTP pipeline is commissioned, submit to the regulator for approval an access arrangement proposal. When the tender approval decision becomes irrevocable, the proposed pipeline becomes a CTP pipeline.<sup>55</sup> As a consequence, the service provider is required

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<sup>52</sup> The designated pipelines are: AGNL’s SA Distribution Network, ATCO’s Western Australian gas distribution system, DUET and Alcoa’s Dampier to Bunbury Pipeline, the three Victorian gas distribution systems and APA Group’s Victorian Declared Transmission System

<sup>53</sup> The pipelines that are currently subject to a 15-year no coverage determination are the APA Group’s Wallumbilla Gladstone Pipeline, the APLNG pipeline, the GLNG pipeline and Comet Ridge to Wallumbilla Pipeline Loop.

<sup>54</sup> Sections 149 and 151 of the NGL.

<sup>55</sup> CTP pipelines include the APA Group’s Central Ranges Pipeline and the associated Central Ranges distribution system in NSW. A tender approval request was approved for the Loddon Murray



to submit an access arrangement to the regulator. This CTP access arrangement is a combination of certain aspects as derived from the tender process and other aspects as approved by the regulator. A CTP access arrangement must have an expiry date that is no more than 15 years from the pipeline's commissioning date.<sup>56</sup> At the expiry of a CTP access arrangement, the pipeline is no longer a covered pipeline.

## **5.1.2 Overview of current framework**

### **Access arrangement review process**

Section 131 of the NGL provides that covered pipeline service providers submit to the regulator, for approval, a full access arrangement or revision to an applicable access arrangement that is a full access arrangement in accordance with the NGR.

The regulator assesses an access arrangement proposal under Part 8 of the NGR.<sup>57</sup> The regulator seeks submissions on the proposal, issues a draft decision for consultation, and issues a final decision to approve or refuse to approve the access arrangement proposal. If the regulator approves an access arrangement proposal, then it approves all of its elements.<sup>58</sup>

The consultative procedure to review a full access arrangement proposal or a revision proposal consists of a:<sup>59</sup>

- pre-submission conference
- submission
- draft decision
- revised proposal in response to draft decision
- draft decision hearing (optional)
- final decision.

The consultative procedure for a limited access arrangement proposal review is expedited.<sup>60</sup>

The regulator has the discretion to make or revise an access arrangement if the service provider fails to do so, or if it does not agree with a service provider's proposal. The

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regional transmission and distribution system in Victoria in December 2001, however the system was never constructed.

<sup>56</sup> Rule 22 of the NGR.

<sup>57</sup> "Access arrangement proposal" refers to the initial access arrangement. Access arrangements are then periodically revised. The process for an access arrangement revision is the same.

<sup>58</sup> Rule 41 of the NGR.

<sup>59</sup> Rules 57-62 of the NGR.

<sup>60</sup> Rule 55 and rule 9 of the NGR



regulator may also revoke an access arrangement during an access arrangement period if it finds a material error or deficiency.<sup>61</sup>

Outside the access arrangement review period, a service provider may submit to the regulator an access arrangement variation proposal at any time.<sup>62</sup>

### **Access arrangement and access arrangement information**

The service provider is required to submit relevant information (access arrangement information) together with an access arrangement proposal. The regulator may request additional information if it deems the submitted information deficient. The regulator then publishes the access arrangement information. However, the service provider may aggregate or withhold from submission sensitive information.

A light regulation pipeline service provider may submit a limited access arrangement.<sup>63</sup> If it does, then the access arrangement must include pipeline identification, website reference for pipeline description, pipeline services, non-price terms and conditions for access to the pipeline services that are likely to be sought by a significant part of the market, queuing requirements (if applicable), capacity trading requirements, extension and expansion requirements, receipt and delivery point change terms and conditions, in addition to any review submission dates or expiry dates. A light regulation pipeline service provider is also required to submit access arrangement information on pipeline capacity and utilisation, and key performance indicators. If a light regulation pipeline service provider submits a limited access arrangement revision proposal, it may withdraw it before the regulator issues a final decision.<sup>64</sup>

A full regulation pipeline service provider submits a full access arrangement that covers all the elements of a limited access arrangement. In addition, it must include a specification of reference services, reference service tariffs and reference service terms and conditions. A full access arrangement must include a submission review date and a revision commencement date, but not an expiry date.<sup>65</sup> A full access arrangement may also include trigger events that bring forward the submission review and revision commencement dates under certain circumstances. Trigger events may include the commissioning of significant extensions or expansions, or throughput reaching a specified level.

An access arrangement revision proposal to the regulator sets out the amendments to the access arrangement that the service provider proposes for the ensuing access arrangement period.

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<sup>61</sup> Only specified types of errors or deficiencies can trigger revocation of an access arrangement. Refer to rules 63-64 of the NGR.

<sup>62</sup> Rule 65 of the NGR. The AEMC understands this has rarely occurred under the Code or the NGR.

<sup>63</sup> The publication of information under rule 55 is an alternative to a limited access arrangement.

<sup>64</sup> Rule 55 of the NGR.

<sup>65</sup> Voluntary full access arrangements may include an expiry date, under rule 49 of the NGR.



## **Regulator's discretion**

Rule 40 of the NGR prescribes three levels of discretion for the regulator on elements of an access arrangement proposal, consistent with regulator's powers in the NGL:

- No discretion. The regulator may not withhold approval to the relevant element of the access arrangement if it meets specified conditions set out in the NGL or the NGR. This is applicable to the access arrangement period, access arrangement submission review date and access arrangement revision commencement date.
- Limited discretion. The regulator may not withhold approval to the access arrangement element if the regulator is satisfied that the element complies with the applicable requirements of the NGL or the NGR and is consistent with any criteria in the NGL. Limited discretion elements are the depreciation schedule and conforming capital expenditure.
- Full discretion. The regulator may withhold its approval to the access arrangement element if in its opinion a more preferable alternative exists that complies with the NGL and NGR. This is applicable to most elements of an access arrangement, including queuing requirements and trigger events. It applies to elements where no specific discretion is identified.

## **5.2 Part 9: price and revenue regulation**

Part 9 of the NGR covers price and revenue regulation, and applies only to full access arrangements. It is organised as follows:

- Division 1: includes relevant definitions and preliminary provisions
- Division 2: covers relevant access arrangement information and the basis on which financial information is to be provided
- Division 3: sets out the building block methodology to determine total revenue for each regulatory year
- Division 4: covers the methodologies to calculate the opening capital base and the projected capital base, in addition to the criteria to include new capital expenditure in the capital base
- Division 5: sets out the provisions for determining an allowable rate of return on the capital base
- Division 5A: lays out the formula and methodology for the calculation of the corporate income tax building block
- Division 6: covers the design of the depreciation schedule and how depreciation is to be calculated
- Division 7: sets out the operating expenditure criteria



- Division 8: covers tariffs for both transmission and distribution pipelines, and discusses revenue equalisation, revenue and cost allocation, in addition to tariff variation
- Division 9: covers incentive mechanisms
- Division 10: sets out fixed principles, which are principles that could be fixed over a specified period that is longer than the access arrangement period.

### **5.2.1 Overview of related legislation**

Section 42 of the NGL grants the regulator the power to gather any information for the performance or exercise of a function or power conferred on it under the NGL or the NGR. Sections 45 and 46 of the NGL identify two regulatory instruments for the regulator to gather information from service providers of scheme pipelines:

- Regulatory information order (RIO): a general order that is made by the regulator and that requires each scheme pipeline service provider of a specified class, or each related provider of a specified class, to either provide to the regulator the information specified in the order, or prepare and maintain the information specified in the order, or both.
- Regulatory information notice (RIN): a notice that is made by the regulator and that requires a scheme pipeline service provider or a related provider to either provide to the regulator the information specified in the order, or prepare and maintain the information specified in the order, or both.

The RIO and RIN are used to gather information that assists in the assessment of an access arrangement.

### **5.2.2 Overview of current framework**

#### **Access arrangement information**

Access arrangement information is information that supports an access arrangement proposal or access arrangement revision proposal. Rules 72 to 75 of the NGR state that access arrangement information for a full access arrangement should include the following:

- capital expenditure for the earlier access arrangement period by asset class (if the access arrangement period commences at the end of an earlier access arrangement period)
- operating expenditure for the earlier access arrangement period by category (if the access arrangement period commences at the end of an earlier access arrangement period)



- usage of the pipeline over the earlier access arrangement period (if the access arrangement period commences at the end of an earlier access arrangement period)
- how the capital base is derived, and how the capital base increased or diminished over the previous access arrangement period (if the access arrangement period commences at the end of an earlier access arrangement period)
- projected capital base over the access arrangement period, including forecast conforming capital expenditure, forecast depreciation, redundant assets and asset disposals
- forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period (to the extent practicable)
- forecast operating expenditure over the access arrangement period
- key performance indicators
- proposed return on equity, return on debt and allowed rate of return, for each regulatory year of the access arrangement period
- estimated cost of corporate income tax
- proposed carry-over of increments for efficiency gains or decrements for efficiency losses in the previous access arrangement period (in case of the operation of an incentive mechanism over the previous access arrangement period)
- tariff setting approach and reference tariff variation mechanism.

The service provider is also required to provide the basis of any financial information, and identify such information as real or nominal with a consistent basis throughout.

### **Total revenue**

Total revenue relevant to the reference service is determined for each regulatory year through a building block approach that aggregates for the year:<sup>66</sup>

- return on the projected capital base
- depreciation on the projected capital base
- estimated cost of corporate income tax
- increments or decrements resulting from the operation of an incentive mechanism
- forecast of operating expenditure.



## Capital and operating expenditure

The NGR state as a requirement that for operating expenditure to be approved and for capital expenditure to be approved as conforming, it must be such as 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.<sup>67</sup>

For new capital expenditure to be approved as conforming, it should also satisfy other criteria as follows:<sup>68</sup>

- the overall economic value of the expenditure directly accruing to the service provider, gas producers, users and end users 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, maintain the integrity of services, 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.

Only projected capital expenditure that satisfies these criteria can be classified as conforming, and rolled into the capital base for the access arrangement period.

Capital expenditure that includes capital contributions by pipeline users may be included in the capital base, subject to the regulator's approval and on condition that the service provider does not benefit from the capital contribution to the capital base.<sup>69</sup>

The regulator may approve that a service provider recover non-conforming capital expenditure through a surcharge, or set it aside in a speculative capital expenditure account and roll it into the capital base only if and when the regulator re-classifies it as conforming.

Rules 85 and 86 of the NGR also provide a mechanism for the classification of assets as redundant, and their consideration under new capital expenditure criteria in case the service provider decides to re-use them.

Under rules 77 and 79 of the NGR, the basis for the calculation of the opening capital base depends on whether the pipeline was commissioned before or after the commencement of the NGR.

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<sup>66</sup> Rule 76 of the NGR.

<sup>67</sup> Rules 79(1)(a) and 91 of the NGR.

<sup>68</sup> Rule 79 of the NGR.

<sup>69</sup> Rule 82 of the NGR.



## **Allowed rate of return**

Rule 87 of the NGR requires that the regulator publish non-binding rate of return guidelines, which set out proposed methodologies to estimate the rate of return; and the estimation methods, financial models, market data and other evidence to estimate the return on equity, return on debt and the value of imputation credits.

To satisfy the allowed rate of return objective, rule 87(3) states 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.

Further clarity around the interpretation of some rules, including the interpretation of the term "benchmark efficient entity with a similar degree of risk", have recently been provided in the Federal Court judgements (May 2017) on the AER's application for judicial review of the Australian Competition Tribunal's merits review determinations for Jemena Gas Networks and the New South Wales and Australian Capital Territory electricity distributors.<sup>70</sup>

## **Depreciation**

The NGR also set out that a depreciation schedule should be designed so that:<sup>71</sup>

- 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 to meet financing, non-capital and other costs.

## **Cost allocation**

The NGR include provisions that require that revenues be allocated across reference services and other services to reflect the allocation of direct and indirect costs across reference services and other services.<sup>72</sup>

## **Tariffs**

The NGR include separate provisions for tariff design for transmission and distribution pipelines. For transmission pipelines, tariffs are required to allocate costs efficiently by

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<sup>70</sup> In this case, the Federal Court found that "the risk is simply the particular service provider's risk in respect of the provision of standard control services. The allowed rate of return objective is no more prescriptive than that". Refer to [FCAFC 79] and [FCAFC 80].

<sup>71</sup> Rule 89 of the NGR.

<sup>72</sup> Rule 93 of the NGR.



user. A reference tariff may not vary during an access arrangement period except through a tariff variation mechanism that is approved by the regulator. The regulator may approve that the service provider offer specified users prudent discounts.<sup>73</sup>

The NGR require distribution pipelines to divide customers into tariff classes that balance economic efficiency and transaction costs.<sup>74</sup>

### **Incentive mechanisms**

Finally, rule 98 states that a full access arrangement may include one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.<sup>75</sup>

### **Fixed principles**

Under rule 99, a full access arrangement may also include one or more principles declared as fixed for a stated period that is longer than the access arrangement period, and could be two or more access arrangement periods.<sup>76</sup>

## **5.3 Part 10: other provisions of and concerning access arrangements**

Part 10 of the NGR covers non-revenue provisions concerning access arrangements, and is organised as follows:

- Division 1: covers general access arrangement requirements
- Division 2: specific provisions, on queuing requirements, extension and expansion requirements, capacity trading requirements and change of receipt or delivery points.

### **5.3.1 Overview of related legislation**

This section outlines significant other legislative provisions concerning access arrangements.

#### **Extension and expansion requirements**

As set out in section 5.1.1, s. 2 of the NGL defines a pipeline. It also defines extension and expansion requirements as:

“(a) the requirements contained in an access arrangement that, in accordance with the Rules, specify –

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<sup>73</sup> Rule 95 of the NGR.

<sup>74</sup> Rule 94 of the NGR.

<sup>75</sup> Unlike the NER, the NGR does not identify or require any particular incentive mechanism.

<sup>76</sup> See for example section 13 of the Dampier to Bunbury Natural Gas Pipeline (DBNGP) Access Arrangement: 2016-2020 Access Arrangement Period - Access Arrangement Document.



(i) the circumstances when an extension to, or expansion of the capacity of, a covered pipeline is to be treated as forming part of the covered pipeline; and

(ii) whether the pipeline services provided or to be provided by means of, or in connection with, spare capacity arising out of an extension to, or expansion of the capacity of, a covered pipeline will be subject to the applicable access arrangement applying to the pipeline services to which that arrangement applies; and

(iii) whether an extension to, or expansion of the capacity of, a covered pipeline will affect a reference tariff, and if so, the effect on the reference tariff; and

(b) any other requirements specified by the Rules as extension and expansion requirements”

Section 18 of the NGL states that an extension to, or expansion of the capacity of, a covered pipeline must be taken to be part of the covered pipeline if the extension and expansion requirements under the access arrangement provide for the access arrangement to apply to pipeline services provided by means of the covered pipeline as extended or expanded. Section 19 states that an extension to, or expansion of the capacity of, a covered light regulation pipeline must be taken to be part of the pipeline.

### **Queuing requirements**

Section 131 of the NGL requires a covered pipeline service provider to comply with the queuing requirements of an applicable access arrangement.

### **Contractual rights**

Under s. 321 of the NGL an applicable access arrangement must not have the effect of depriving a person of a relevant protected contractual right.

### **Alternative agreements**

Under s. 322 of the NGL, a service provider may enter into agreement for access different from the applicable access arrangement.

## **5.3.2 Overview of current framework**

Part 10 of the NGR requires an access arrangement to be consistent with the NGO, NGR and procedures that are in force when the access arrangement is determined or revised.



## Reference service

A full access arrangement must specify as a reference service at least one pipeline service that is likely to be sought by a significant part of the market.<sup>77</sup> The regulator approves reference services having regard to the revenue and pricing principles set out in s. 24 of the NGL. The regulator may also require additional pipeline services that are likely to be sought by a significant part of the market to be reference services.

## Extension and expansion requirements

In line with the NGL's definition of extension and expansion requirements, access arrangements must include extension and expansion requirements that may:

- state whether the applicable access arrangement will apply to services to be provided as a result of an extension to, or expansion of the capacity of, the pipeline
- outline basis to determine whether the applicable access arrangement will apply to services to be provided as a result of a pipeline extension or expansion
- in case of the application of an access arrangement to incremental services as a result of an extension or expansion, outline the tariff impact.

Rule 104 states that extension and expansion requirements of an access arrangement cannot force the service provider to fund an extension or expansion.

## Queuing requirements

Access arrangements for transmission pipelines must include queuing requirements. Queuing requirements outline in sufficient detail a mechanism for establishing an order of priority between prospective users of spare or developable capacity.<sup>78</sup> Rule 103 of the NGR sets out that queuing requirements provide that the order of priority be determined on a first-come-first-served basis, or on the basis of a publicly notified auction in which all prospective users of the relevant spare capacity or developable capacity are able to participate.

## Trading of capacity

An access arrangement must also include trading requirements for the pipeline.

Rule 105 of the NGR allows trading of pipeline capacity in markets in which the service provider is a registered participant, and outside these markets. Moreover, a pipeline user may subcontract its capacity to a third party with or without the service provider's consent. If the transfer of capacity rights is without the service provider's consent, then the transferor's rights and obligations to the service provider are unaffected by the transfer. However, the transferor must immediately give notice to the service provider

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<sup>77</sup> Rule 101 of the NGR.

<sup>78</sup> Rule 103 of the NGR. Distribution pipeline access arrangements must include queuing requirements if required to do so by the regulator.



of the subcontract and its likely duration, identity of the third party, and the amount of the transferred capacity. If the transfer of capacity rights is with the service provider's consent, which the service provider cannot withhold unless under reasonable grounds, then the transferor's rights and obligations to the service provider are terminated or modified, and a contract arises between the service provider and the third party.<sup>79</sup>

Finally, rule 106 of the NGR requires an access arrangement to allow for and specify conditions under which a user may change receipt or delivery points.

## **5.4 Part 11: facilitation of, and request for, access**

Part 11 of the NGR sets out rules regarding access request procedures, which includes information disclosure requirements for scheme pipelines.

### **5.4.1 Overview of related legislation**

The NGL protects contractual rights outside of an access arrangement.<sup>80</sup> An access arrangement does not deprive a person of a protected contractual right (other than exclusivity rights) in force before an access arrangement was required to be submitted. The NGL allows a service provider to enter into a gas transport agreement (GTA) that is different from an applicable access arrangement. An applicable access arrangement applies to a pipeline service that is provided by means of a pipeline regardless of who provides the pipeline service.<sup>81</sup>

### **5.4.2 Overview of current framework**

#### **Information disclosure**

Rule 107 of the NGR requires scheme pipeline service providers to publish applicable access arrangements on their websites.

The NGR give the regulator the power to require a scheme pipeline service provider to provide, free of charge and within five business days or another timeframe specified by the regulator, any information that a prospective user reasonably requires to decide whether to seek access to a pipeline service provided by the service provider.<sup>82</sup>

Users of a scheme pipeline are required to provide information on unutilised contracted capacity.<sup>83</sup>

Scheme pipeline service providers of a transmission pipeline are required to maintain a register of spare capacity, which covers both current and potential spare capacity on

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<sup>79</sup> Rule 105 of the NGR.

<sup>80</sup> Section 321 of the NGL.

<sup>81</sup> Section 323 of the NGL.

<sup>82</sup> Rule 107 of the NGR.

<sup>83</sup> Rule 110 of the NGR



the pipeline. The register should include information about when the spare capacity will become available, quantity and type of spare capacity, and proposed terms and conditions for the sale of the spare capacity.<sup>84</sup>

### **Access request procedure**

Rule 112 outlines the access request procedure. A prospective user must make an access request in writing, and must state:

- time that the pipeline service will be required
- capacity that is to be utilised
- entry point where the user proposes to introduce natural gas to the pipeline, or exit point where the user proposes to take natural gas from the pipeline
- relevant technical details for the pipeline connection.

The service provider must then respond to the access request within 20 business days on whether or not it can provide the requested pipeline service:

- if it can, service terms and conditions
- if it cannot, written reasons explaining why it cannot, and details of when capacity to provide the requested service is likely to become available
- if it requires an investigation to determine whether it can or cannot, details of the investigation, including time frame and cost. In this case, the service provider is taken to have rejected the prospective user's request if the parties have not agreed on the service provider's proposal or a negotiated modification of it within 20 business days after the date of the response. If the parties agree on the service provider's proposal or on some negotiated modification of it within 20 business days after the date of the response, then the service provider must carry out the investigation in accordance with the agreement. The service provider would then inform the prospective user whether it can provide the requested pipeline service.

### **Other key provisions**

Rule 108 of the NGR requires a scheme pipeline service provider to provide a tariff for any pipeline service that a user may request and that a service provider may feasibly provide.

Rule 109 of the NGR prohibits scheme pipeline service providers from bundling services unless reasonably necessary. This rule also requires access arrangement services to follow this principle.

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<sup>84</sup> Rule 111 of the NGR



## 5.5 Part 12: access disputes

Part 12 of the NGR provides a framework to resolve access disputes:

- Division 1: preliminary, covers useful definitions
- Division 2: safety of operation notification, covers the refusal to grant access on safety grounds
- Division 3: access determinations, covers access determinations in relation to capacity expansions.

### 5.5.1 Overview of related legislation

Section 2 of the NGL defines the dispute resolution body as the AER. The NGL(WA) defines the WA arbitrator as the dispute resolution body for pipelines that fall under the jurisdiction of Western Australia, including international pipelines that are in Western Australia.<sup>85</sup>

Section 2 of the NGL outlines the dispute resolution process as follows:

- the access seeker or pipeline operator 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 make a determination in writing with clearly stated reasons
- 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 applicable access arrangement
- each party bears its own costs in a dispute hearing.

### 5.5.2 Overview of current framework

The NGR provide for the resolution of an access dispute between a scheme pipeline service provider and user.

One reason that a service provider may refuse to provide a requested pipeline service is on safety grounds. If an access dispute arises as a consequence of the refusal in this case, then the service provider may give a safety of operation notification. The service

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<sup>85</sup> Section 9 of Schedule 1 to the *National Gas Access (WA) Act 2009*. This is currently the Western Australian Energy Disputes Arbitrator.



provider is then required to submit the name of an independent expert to provide an expert safety report.<sup>86</sup>

The NGR also require that access disputes consider capital contributions to the pipeline made by any party to the dispute.<sup>87</sup>

Part 12 also outlines provisions in relation to access disputes that raise the question of an expansion or funding of an expansion, or an extension:

- access determination may require a capacity expansion that is both safe and feasible, but may not require an extension of the pipeline<sup>88</sup>
- for a light regulation pipeline, an access determination may only require the service provider to expand capacity if the disputing party funds the expansion, and the expansion is both feasible and safe
- for a full regulation pipeline, an access determination may only require the service provider to expand capacity if the applicable access arrangement allows for its funding, and the expansion is both feasible and safe
- for a user funded expansion, an access determination may make consequential amendments to the applicable access arrangement that may include a mechanism to roll some or all the capital costs into the capital base, consequential adjustments to reference tariffs, surcharge to be levied on users of incremental services, and establishment of a speculative capital expenditure account and regulation of its operation.<sup>89</sup>

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<sup>86</sup> Rule 115 of the NGR.

<sup>87</sup> Rule 117 of the NGR.

<sup>88</sup> Rule 118 of the NGR.

<sup>89</sup> Rule 119 of the NGR.



## **6 Issues for discussion**

This chapter sets out a number of issues and questions regarding the current regulatory framework for scheme pipelines that the AEMC is aware of from its own work to date as well as from the ACCC inquiry. The issues are interlinked, but the chapter groups them according to the assessment framework as follows:

- efficient and effective regulatory framework
- efficient investment in gas pipelines
- efficient operation and use of gas pipelines
- incentives to provide access to pipeline services
- tariff and non-tariff terms and conditions of access.

Generally, these issues have been discussed in relation to both transmission and distribution pipelines. Where there may be differences, these have been noted.

Stakeholders are invited to consider and respond to these issues, in addition to any other matters that they consider relevant to this review.

### **6.1 Efficient and effective regulatory framework**

#### **6.1.1 Purpose of regulatory framework**

As discussed in Chapter 4 of this issues paper, the underlying purpose of applying economic regulation to pipelines was to enable access to essential facilities at fair and reasonable terms through:

- the use of economic regulation to form the basis of a regulator-approved access arrangement that would provide information to users and potential users on the terms and conditions of access to the pipeline
- the creation of a disputes resolution mechanism, or arbitration framework, to be available when negotiations fail to reach a satisfactory conclusion.

Fundamental to this negotiate-arbitrate approach is that:

- existing contracts cannot be overridden by an access arrangement
- facility owner's usage rights are safeguarded and commercial return on investment is appropriate.

It is also critical to note the intention of the framework is that economic regulation (and so, a full access arrangement) should only be applied to pipelines where the benefit of doing so outweighs the costs. The question of whether full regulation should be



applied rests first on the coverage test and then secondly on the form of regulation factors.<sup>90</sup>

Within the context of a negotiate-arbitrate framework, the economic regulation applied to full regulation pipelines is incentive-based regulation. Broadly, the regulators make decisions to approve or not approve access arrangement proposals with reference to a prudent service provider who provides pipeline services efficiently and consistent with good industry practice. The services should be provided in a low sustainable cost manner.<sup>91</sup>

In addition, a service provider should be provided with effective incentives to relation to the operation, use and investment in a pipeline. A reference tariff should also enable a service provider to recover a return that reflects the risks of providing the reference service.<sup>92</sup>

While the overall framework is incentive-based, the NGR does not prescribe any specific incentive mechanisms. Rule 98 makes general provision for an access arrangement to include one or more incentive mechanisms, providing a high level of discretion to service providers and the regulators.

**Question 1      Purpose of the regulatory framework**

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

**6.1.2    Efficiency of full regulation**

If any form of economic regulation is to be applied, then its efficiency in meeting its objective should be considered. That is, does the framework achieve its purpose so that benefits outweigh costs or should an alternative framework be employed?

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<sup>90</sup>    See Chapter 4 of this paper.

<sup>91</sup>    See, for example, rule 79(1)(a).

<sup>92</sup>    See the revenue and pricing principles in s. 24 of the NGL.



The NGR provides for economic regulation to be applied in regard to pipelines that have been designated as being subject to full regulation. Significant resources of the regulator, service provider and interested stakeholders are involved in each full access arrangement process. A scheduled access arrangement or access arrangement revision process takes up to 13 months from submission by the service provider.<sup>93</sup> The AEMC understands that the time taken by service providers to prepare an access arrangement proposal may be at least this long again. In 2012, the AEMC amended provisions in the National Electricity Rules (NER) to extend the equivalent process for electricity, and added provisions in relation to consumer consultation.<sup>94</sup>

The outcome of the full regulation process is an access arrangement that can be used by users to support their negotiation for pipeline services. However, for some pipelines there is no spare capacity available and none may be offered under the reference service terms and conditions. Moreover, there has been no arbitration (that would make use of an access arrangement in that process) on any gas pipeline under the Code or the NGR. This raises the question of whether the potentially lengthy and costly access arrangement process produces sufficient benefits and could be considered consistent with the NGO.<sup>95</sup>

The ACCC inquiry has considered whether an alternative regulation model to the negotiate-arbitrate regime would be more effective. In this context, the ACCC inquiry report discussed direct service regulation in which a list of pipeline services are price regulated.<sup>96</sup> During the course of the inquiry, the ACCC looked at the gas pipeline regulatory framework in North America that applies a negotiated settlement approach. This approach is summarised in the box below.

**Box 6.1                      Negotiated settlement regulatory approach example**

The Canadian National Energy Board (NEB) regulates hydrocarbon pipelines that cross provincial boundaries. The NEB is required to regulate pipeline tolls (prices) and tariffs (non-price terms and conditions) so that they are “just and reasonable” and there is “no unjust discrimination in tolls, service or facilities”.

Pipeline companies are divided into two groups for financial and regulatory purposes. Group 1 consists of pipeline companies with extensive systems and several third party shippers. Group 2 consists of the remaining pipelines that operate smaller, less complex pipelines with few or no third party shippers. All Group 2 and two Group 1 pipelines are regulated on a complaint basis, where the

<sup>93</sup> Rules 13 and 14 of the NGR. Under rule 55 of the NGR, limited access arrangements are to be made under the expedited consultative procedure in rule 9.

<sup>94</sup> This rule change was the price and revenue regulation of gas services (GRC0011). Other rules made in relation to Parts 8 to 12 of the NGR have been: Reference service and rebateable service definitions (GRC0012); Setting the opening capital base (GRC0025); and Rate of return guidelines review (GRC0038).

<sup>95</sup> For discussion on the costs of regulatory decision processes, see AEMC, *Review into the use of total factor productivity for the determination of prices and revenue: perspectives on the building block approach*, 30 July 2009.

<sup>96</sup> ACCC, *Inquiry into the east coast gas market*, April 2016, pp. 134-135.



affected parties are encouraged to resolve any problems with the pipeline company. If this is not successful, they may file a complaint with the NEB.

Other Group 1 pipelines have their “toll settlement” determined through one of two processes:

- Detailed “toll application”, made to the NEB. The NEB then assesses the application. This assessment process generally involves formal public hearings and applies cost of service regulation.
- Negotiated toll settlement reached between the pipeline company, its shippers and other stakeholders. The negotiated settlement is assessed for approval against NEB guidelines.<sup>97</sup>

Until the mid 1990s, the main method of regulation was cost of service. Pipeline companies came before the NEB, often annually, to determine the amount of revenue that the pipeline company was allowed to recover through its tolls. Under this cost of service approach, a pipeline company's tolls are set so investors can recover costs and earn a reasonable return on their investment. However, negotiated settlements have been supported as an alternative to toll hearings since the mid 1980s.

From the mid 1990s, the NEB approved a succession of multi-year negotiated settlements, which often included incentives to reduce costs and provisions to share savings between the pipeline and its shippers. In considering whether to approve a negotiated settlement the NEB takes into account the views of all interested parties, as well as broader public interest concerns. The NEB either accepts or rejects a settlement package in its entirety.

A pipeline company cannot charge a toll unless it is included in a tariff filed with the NEB or approved by a Board Order. The tariff also contains the conditions under which transportation service is provided.

Toll design divides costs between the various functions performed by the pipeline systems, and then determines costs and usage of those functions. Some costs are common to every unit of throughput, while others may depend on variables, such as distance shipped.

Where the effective date for new tolls passes before tolls are finalised the NEB may let companies charge tolls on an interim basis, with refunds or charges paid once final tolls are determined.

Source: NEB website: <https://www.neb-one.gc.ca/nrg/sttstc/ntrlgs/index-eng.html>

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<sup>97</sup> NEB, *Guidelines for Negotiated Settlements of Traffic, Tolls and Tariffs*, 12 June 2002.



## **Question 2      Efficiency of full regulation**

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

### **6.1.3      Efficiency of light regulation**

Under rule 34 of the NGR an application to the NCC can be made to change the status of a full regulation pipeline to a light regulation pipeline. A pipeline's light regulation status can also be revoked (rule 38). Where a non-scheme pipeline is the subject of a coverage determination, the NCC is to also make a decision on the form of regulation for that pipeline.<sup>98</sup> In each of these decision making processes, the NCC decides on the application based on form of regulation factors set out in s. 16 of the NGL.<sup>99</sup>

Once a pipeline is subject to light regulation it may submit a limited access arrangement to the regulator or it must publish certain information (prices and non-prices terms and conditions) on light regulation services on its website. Part 11 of the NGR, in regard to the facilitation of access, also applies to light regulation pipelines. The arbitration framework provided through Chapter 6 of the NGL and Part 12 of the NGR is relevant to light regulation pipelines.

The value of this light regulation approach to users has been questioned in light of the GMRG's work that has designed an information disclosure and arbitration framework for non-scheme pipelines that may be regarded as a more onerous regulatory framework than the current light regulation regime.<sup>100</sup> As a consequence, there have been some suggestions that the light regulation regime should be removed from the NGL and NGR.<sup>101</sup>

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<sup>98</sup> Sections 109-110 of the NGL.

<sup>99</sup> See section 5.1.1 of this issues paper for an overview of the form of regulation factors.

<sup>100</sup> GMRG, Gas pipeline information disclosure and arbitration framework final design recommendation, June 2017, p. 13.

<sup>101</sup> See sections 2.4 and 4.1.2 for a discussion on the light regulation regime.



The AEMC notes the concerns about how the GMRG's development of a regulatory regime for pipelines that had not been subject to any regulatory oversight might interact with light regulation. However, while there may be some validity in those concerns, the AEMC is also aware that there is considerable uncertainty among stakeholders on how the light regulation part of the regulatory framework operates and should be enforced.

### **Question 3      Efficiency of light regulation**

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

#### **6.1.4      Efficiency of regulatory discretion**

Many provisions in Part 9 of the NGR, particularly in relation to the building blocks methodology, are similar (or similar in intent) to those included in the NER.<sup>102</sup> However, there are some NGR provisions that are less prescriptive and leave greater discretion for both the service provider and the regulator.

In addition to the varying level of prescription, some provisions specify that the regulator has limited discretion. Others infer a full level of regulator discretion.<sup>103</sup> The purpose of this specification, and the reason for the different treatment of the different rules, is not clear.<sup>104</sup>

### **Question 4      Efficiency of regulatory discretion**

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

<sup>102</sup> The degree of similarity can be inferred by the regulators' rate of return guidelines.

<sup>103</sup> Rule 40 of the NGR. There are no similar provisions in the NER.

<sup>104</sup> See section 5.1.2 for a more detailed discussion.



## 6.2 Efficient investment in gas pipelines

The majority of investments by service providers to build a new pipeline or to increase capacity or build an extension for an existing pipeline are underwritten by contracts with pipeline users.<sup>105</sup> As noted by the pipeline industry, there has been significant investment undertaken. It reports that since 2000, more than \$10 billion has been invested in gas transmission pipelines. This represents 4,000km of new pipelines and a number of expansions of key pipelines.<sup>106</sup>

### 6.2.1 Conforming capital expenditure

A service provider of a pipeline subject to full regulation is required to provide a forecast of capital expenditure for the forthcoming access arrangement period to the regulator as part of the pipeline's access arrangement proposal. This forecast capital expenditure is assessed against rule 79, the new capital expenditure criteria, as to whether it is forecast conforming capital expenditure.

When the access arrangement is next before the regulator as scheduled, the assessment moves to actual capital expenditure and the question of whether the actual costs incurred by the service provider satisfy the criteria and can be regarded as conforming capital expenditure and added to the capital base (rule 79(6)).<sup>107</sup>

The criteria in rule 79(1)(a) includes the overarching requirement that:

“the capital expenditure must be such as 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”

In addition, the expenditure must meet either one or more of:

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

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<sup>105</sup> The exception to this is the Victorian DTS, where the access arrangement approval process plays a significant role in establishing both forecast and actual capital expenditure for APA.

<sup>106</sup> APGA, submission to the examination of the current test for the regulation of gas pipelines consultation paper, 18 October 2016, p. 4.

<sup>107</sup> This contrasts to the NER, where an ex-post assessment of capital expenditure only occurs under certain conditions.



The discretion of the regulator is limited for this rule.<sup>108</sup>

**Question 5      Conforming capital expenditure**

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

**6.2.2      Extension and expansion requirements**

As noted in section 5.3.2 of this issues paper, under rule 104 of the NGR (and ss. 18 and 19 of the NGL), an access arrangement must include information on how future extensions and expansions to the covered pipeline will be treated. This may also include information on the impact on tariffs.

In effect, the NGR provides service providers with discretion (subject to approval by the regulator) on whether a future extension or expansion will be included as part of the covered pipeline and consequently, be included in the access arrangement. As a result, there is considerable variation across access arrangements on the matter of including or excluding extensions and expansions and the conditions under which this occurs.

In practice, there are access arrangements that exclude extensions and/or expansions from the relevant access arrangement. These access arrangements tend to be for transmission rather than distribution pipelines. This results in pipelines that are partially covered. For example, close to half of the total capacity of the Goldfields Gas Pipeline (GGP) is not part of the covered pipeline.<sup>109</sup>

The result of partially covered pipelines is that total pipeline revenue and costs must be allocated between the covered and uncovered parts of the pipeline (rule 93) and tariffs must be set with reference to the cost to provide the relevant service (rules 94 and 95). While both require the regulator's approval, the regulator has limited discretion in regard to tariff setting.

The ACCC has highlighted that the discretion under the current rules on the coverage of expansions of covered pipelines is an issue.

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<sup>108</sup> See section 5.1.2 for a more detailed discussion.

<sup>109</sup> ERA, *Draft decision on proposed revisions to the access arrangement for the Goldfields Gas Pipeline*, 17 December 2015, p. 3.



**Question 6      Extension and expansion requirements**

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

**6.2.3      Investment in excess capacity**

In making investments underwritten by pipeline users, and in consideration of the needs of financiers, service providers have tended to size investments to the needs of those users. That is, it is rare that investment results in excess capacity on a pipeline. Under such circumstances, users will be paying for the pipeline that they require and use. It is unlikely that users will be paying for pipeline capacity that is not immediately required.

Nevertheless, noting the lumpy nature of some pipeline assets, some excess capacity may occur on pipelines at times. In some cases, there could be a long term efficiency argument that a pipeline be built with some short term excess capacity if it is expected that this capacity will be required in the future. For example, having regard to long term forecast demand, it could be prudent to build an eight inch pipeline rather than build a six inch pipeline to meet current demand and then add an expansion in the future.

For pipelines subject to full regulation, the NGR provides a mechanism that can be used to manage excess pipeline capacity arising from an investment. The speculative capital expenditure account (rule 84) allows an amount invested that is not supported by the current market demand to be put aside, separate to the capital base. It may be subsequently added to the capital base, with a rate of return, if circumstances change and that capacity is required by users. The AEMC understands this rule has rarely been used.

In a similar manner, it should also be noted that the NGR provides, subject to an access arrangement, for assets that are no longer required to provide pipeline services to be set aside from the capital base. Rule 86 permits redundant assets to be removed from the capital base and later reinstated (with a rate of return) when the assets are required.



### **Question 7      Investment in excess capacity**

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

## **6.3      Efficient operation and use of gas pipelines**

### **6.3.1      Capacity available under an access arrangement**

An access arrangement sets out the reference services, reference tariffs and the related non-tariff terms and conditions to assist third parties in obtaining access to the spare capacity on a covered pipeline.

The majority of pipelines operate under a contract carriage capacity management approach. This manages capacity by users contracting with service providers to book a certain amount of capacity of the pipeline to enable gas to be transported. These contracts may be of short or long duration. The alternative capacity management approach is market carriage. This applies to the Victorian Declared Transmission System (DTS). Under this approach the pipeline is operated as an open access pipeline and its management (of what gas is to flow where) is carried out by AEMO through the operation of the DWGM.

For contract carriage pipelines, there may be capacity that is not contracted to users. There may also be capacity that is contracted to users but is unused. Information concerning both circumstances are relevant to prospective users.<sup>110</sup> For this reason, rule 110 of the NGR requires pipeline users to disclose any unused contracted pipeline capacity that they have contracted for. Rule 111 also requires scheme pipeline service providers to maintain a register of spare capacity.

However, it has been suggested that some covered transmission pipeline foundation users may allocate pipeline capacity among themselves. As a result, spare capacity to access the reference service at the reference tariff may not be available on these pipelines.<sup>111</sup>

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<sup>110</sup> Preamble to section 5 of the Code.

<sup>111</sup> GMRG is currently developing reforms in regard to the trading of secondary pipeline capacity.



Similarly, the definition of the pipeline service provider could impact the availability and offering of spare capacity on a pipeline.<sup>112</sup> For example, where a covered pipeline has multiple owners, a joint venture that owns part of the pipeline capacity may be designated as the service provider under an access arrangement. In these cases, it is not clear if any spare capacity that is directly controlled by the owners outside the joint venture service provider could be available under the access arrangement.

**Question 8      Capacity available under an access arrangement**

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

### 6.3.2 Extensions to the pipeline

As noted above, an access arrangement is required to specify the intended treatment for extensions and expansions of the covered pipeline. In practice, access arrangements vary on addressing this issue. Where access arrangements exclude expansions from a covered pipeline, the ACCC has expressed concern about the impact this has for users of that pipeline.<sup>113</sup> However, less concern has been expressed in relation to extensions.

It has been suggested that there is competition in building an extension to an existing covered pipeline although the extent of this competition is unclear. While a user may be able to make alternative construction arrangements, it remains that the newly built extension must connect to the covered pipeline and the user must negotiate with the service provider. It appears that such negotiations are commercial. In contrast, the NER provides negotiation frameworks to facilitate the connection of a separately owned asset to an electricity network.

<sup>112</sup> The NGR defines a scheme pipeline service provider as a service provider for a scheme pipeline.

<sup>113</sup> ACCC, *Inquiry into the east coast gas market*, April 2016, p. 135.



**Question 9      Extensions to the pipeline**

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

**6.3.3      Performance indicators**

Within Parts 8 to 12 of the NGR, rules 45 and 72(1)(f) of the NGR require service providers of light regulation and full regulation pipelines to provide information on key performance indicators as part of an access arrangement.<sup>114</sup> The indicators to be reported are not identified by the rules. However, for a pipeline subject to full regulation, the indicators are to support forecast expenditure for the access arrangement period. The usefulness and relevance of these requirements appears uncertain, particularly as there is no requirement for any consistency of reporting over time or across pipelines.

**Question 10      Performance indicators**

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

**6.4      Incentives to provide access to pipeline services**

**6.4.1      Purpose and definition of reference services**

The current gas access regime for parties seeking to obtain access to covered pipelines is a negotiate-arbitrate model. It requires a service provider of a covered pipeline to include in an access arrangement for the regulator's approval:

- at least one reference service
- a reference tariff for each reference service

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<sup>114</sup> Other performance measures may be required under other parts of the NGR or the National Energy Retail Law.



- the non-tariff terms and conditions for the reference service.

The reference service serves as a benchmark for negotiating a gas transport agreement (GTA) with a full regulation transmission pipeline. Final terms and conditions may depend on the bargaining power of the parties. The relevance of the reference service to the negotiations will be influenced by the particulars of the definition of the reference service, including the associated terms and conditions. If the reference service is the service sought by the user or similar to the sought-after service then the access arrangement can aid negotiations and offer a more level playing field for the user. If the reference service is less relevant to the user, then the value of the access arrangement as a point around which negotiations can successfully take place is diminished.

For full regulation distribution pipelines, service providers have defined the services that they offer to retailers (as distribution pipeline users) as reference services.<sup>115</sup> Some of these service providers have also appended a template service agreement to their access arrangements, which sets out reference terms and conditions.<sup>116</sup> As a result, the reference services included in distribution access arrangements tend to be the services used by the distribution pipeline users and negotiations are limited.

The definition of a reference service is set out in rule 101 of the NGR:

“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.”

Some concerns about this definition are that:

- The definition refers to market demand to determine if the service should be the subject of economic regulation rather than a reference to the potential contestability of the service (as used by the AER under the NER).<sup>117</sup>
- Only one reference service is required to be included in an access arrangement, and this service may not be sufficiently similar to the service sought by the user to aid negotiations for a GTA.
- The discretion provided to the service provider results in significant variations on how reference services for different pipelines are described. Some reference

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<sup>115</sup> APA Group also uses the AER approved reference tariffs as tariffs for the pipeline services on the Victorian Declared Transmission System.

<sup>116</sup> For example, ATCO Gas Australia, Access arrangement for the mid-west and south-west gas distribution systems, 25 October 2016, Annexure F: Template service agreement.

<sup>117</sup> ACCC, *Inquiry into the east coast gas market*, April 2016, pp. 134-135.



service definitions are more detailed than others, and some include parameters such as receipt and delivery points and specific time periods. Other reference service definitions are simply described as a type of service. Such variations may make it difficult for users to compare services across pipelines or over time. The particular definition of a reference service may also impact on its relevance to provide a reference point for the user negotiating a non-reference service.

In addition, the AEMC understands that regulators have experienced some difficulties in contesting reference service definitions, or in requesting that additional services be defined as reference services. In part, the difficulty arises from managing potentially significant changes to the access arrangement within the timeframe of reviewing an access arrangement proposal.<sup>118</sup>

For electricity, there is a framework and approach paper process at the start of the revenue proposal process (the equivalent to the access arrangement process). Within this, the AER defines the relevant services, and determines which, if any, form of regulation applies to each service.

The ACCC identified the definition of reference services as an important issue.

**Question 11 Purpose and definition of reference services**

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

**6.4.2 Light regulation and limited access arrangements**

A service provider of a light regulation pipeline is required to either publish certain information on its website or to seek the regulator's approval of a limited access arrangement.

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<sup>118</sup> Changes to the reference services will have a flow on effect to cost allocation and specifying reference tariffs as well as consideration of terms and conditions relevant to each reference service.



Rule 36 specifies that the published information must be the prices and other terms and conditions for the pipeline services.<sup>119</sup>

Rule 45 sets out what must be included in a limited access arrangement. This includes describing the pipeline services that the service provider intends to provide. Non-price terms and conditions related to those services that are likely to be sought by a significant part of the market are to also be included in the access arrangement. No service providers have submitted a limited access arrangement to a regulator.

As noted earlier, the light regulation regime was intended to provide information to users and prospective users that would be relevant to the negotiation of pipeline services. The value of this regime has been questioned, and Dr Vertigan has identified this as an issue.<sup>120</sup>

#### **Question 12      Light regulation and limited access arrangements**

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

#### **6.4.3      Providing information**

Under rules 107 and 44 a service provider is required to publish an access arrangement as approved by the regulator as well as the access arrangement information relating to that access arrangement.

The access arrangement information for a pipeline must include information on operating expenditure for the previous access arrangement period by category. However, the rules do not require the service provider to maintain consistent operating expenditure categories across periods to enable direct comparison.<sup>121</sup>

In addition, under rule 107 prospective users are able request that the regulator issue a notice to a service provider for that service provider to provide specified information on accessing the pipeline.

In addition, Part 11 of the NGR sets out the requirements to publish or provide information to facilitate access to a covered pipeline. This includes information regarding tariffs and the available capacity on the pipeline.

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<sup>119</sup> Under rule 36(2) of the NGR, the prices of the pipeline services must still be published if there is a limited access arrangement.

<sup>120</sup> Dr Vertigan, *Examination of the current test for the regulation of gas pipelines*, 14 December 2016, pp. 15-16.

<sup>121</sup> Rule 72(1)(a)(ii) of the NGR.



Where a light regulation pipeline has no limited access arrangement approved, then the service provider of that pipeline must publish the price and non-price terms and conditions of access to pipeline services available on that pipeline.<sup>122</sup>

It should also be noted that some covered pipelines will also be Bulletin Board pipelines and be required to provide certain information to AEMO for publication on the Bulletin Board. The Bulletin Board provides information on pipeline capacity outlooks, shipper details and nominations.<sup>123</sup>

As noted by the AEMC in its east coast gas review, the ACCC and Dr Vertigan, the publication and provision of information relating to the availability of pipeline services plays an important role in addressing the information asymmetry in favour of the service provider that exists. More informed users and prospective users should be better placed to enquire about and negotiate for pipeline services.<sup>124</sup>

#### **Question 13      Providing information**

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

#### **6.4.4 Arbitration**

Chapter 6 of the NGL and Part 12 of the NGR provide a framework for the resolution of access disputes regarding covered pipelines. This dispute resolution framework has never been tested under either the Code or the NGR. This was identified as an important issue for this review by the ACCC in its inquiry report.

As part of Dr Vertigan's examination of the coverage test, pipeline users expressed a number of concerns about the current arbitration framework. In particular, concern

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<sup>122</sup> If there is a limited access arrangement, the price information must still be published (rule 36(2)).

<sup>123</sup> Part 19 of the NGR. Information on regulatory decisions for pipelines is provided by the AEMC scheme register under Part 15 of the NGR.

<sup>124</sup> The importance of addressing information asymmetry is discussed by Dr Vertigan and the GMRG. It is reflected in their respective recommendations to develop information disclosure requirements for non-scheme pipelines. GMRG, *Gas pipeline information disclosure and arbitration framework, final design recommendation*, June 2017.



was expressed about the perceived uncertainty of the dispute resolution process, which could be the result of any of the following:<sup>125</sup>

- Pipeline users have avoided “rocking the boat” to protect broad and long term business interests with pipeline service providers
- The time frame for dispute resolution is perceived as long
- The legal costs of arbitration are perceived as prohibitive
- An access arrangement is the arbitration offer for a full regulation pipeline. In which case, a poorly defined reference service on a transmission pipeline may impede the usefulness of the access arrangement
- Pipeline users perceive uncertainty in how the regulator would price a disputed service in reference to the NGR and revenue and pricing principles, as the NGR does not explicitly reference the access arrangement in access determinations of full regulation pipelines
- Pipeline users and regulators perceive further uncertainty in how access on a light regulation pipeline would be arbitrated, as regulators have collected little information on these pipelines and these pipelines may not have had any previous access arrangement in place (which would have established some key parameters such as the initial capital base).

#### **Question 14      Arbitration**

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

## **6.5      Tariff and non-tariff conditions of access**

### **6.5.1      Tariffs**

The ACCC inquiry report commented that:<sup>126</sup>

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<sup>125</sup> GMRG, *Gas pipeline information disclosure and arbitration framework, implementation options paper*, March 2017, p. 48.

<sup>126</sup> ACCC, *Inquiry into the east coast gas market*, April 2016, p. 100.



“There is evidence that some pipelines that are subject to full regulation are taking advantage of the limitations in the gas access regime to exercise market power”

The ACCC also commented that it had:<sup>127</sup>

“found that there is some substance to the claim by market participants that a large number of pipeline operators are engaging in monopoly pricing and that the price that are being charged for some services are excessive.”

In drawing this conclusion, the ACCC had considered information in regard to a number of major arterial and some smaller transmission pipelines. This sample included two pipelines that are currently subject to full regulation.<sup>128</sup>

For a pipeline subject to full regulation, the regulator is required to approve a reference tariff for each reference service. As a result, identifying and clearly defining the reference services for a covered pipeline is the first key step.

Next, is the question of determining reference tariffs. Under rule 93, this requires total revenue for the pipeline to be allocated between reference and non-reference service according to the costs attributable to those services. Costs are determined under the building block approach and, where relevant, with reference to the regulator’s rate of return guidelines (rule 87).<sup>129</sup>

Having determined the costs, tariffs are set for tariff classes (for distribution pipelines) and reference services (for transmission pipelines). The regulator’s discretion regarding the setting of tariffs is limited.

Broadly, users should pay for the services they use and the tariff paid for these services should reflect the cost of providing those services.<sup>130</sup> To achieve this, not only is the determination of total costs important, but the allocation of those costs across the various pipeline services is also important. An imprecise allocation of costs by the service provider to the reference service could mean that users of some services may be cross-subsidising users of other services. Such uneven cost recovery may distort incentives for efficient investment in, and operation of, a pipeline.

This result may arise because:

- the NGR requirements on the method to allocate indirect costs are principles-based and regulators may have difficulty in confirming, or requiring amendments to, the service provider’s approach

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<sup>127</sup> *ibid.*, p. 103.

<sup>128</sup> *ibid.*, p. 104

<sup>129</sup> The regulator is required to publish non-binding guidelines on the methodology, estimation methods, financial models, market data and other evidence that it would consider when evaluating a service provider's proposed rate of return. The AER publishes these guidelines for gas pipelines within its jurisdiction. The ERA publishes guidelines for Western Australian gas pipelines.

<sup>130</sup> Noting that the NGR does provide some flexibility in terms of prudent discounts under rule 96.



- the costs allocated to uncovered parts of a pipeline could be calculated on a marginal cost basis, incorrectly inflating the costs to be recovered by through reference tariffs
- the NGR does not provide specific guidance on allocating the capital costs where a pipeline is partially covered.

In relation to this last point, the AEMC understands that in its draft decision in relation to the GGP access arrangement revision proposal for 2015-2019, the ERA put forward an approach for the allocation of costs between covered and uncovered capacity on the GGP.<sup>131</sup> However, the ERA abandoned its approach in the final decision on the basis that the NGR does not allow for such an allocation with certainty.<sup>132</sup>

An outline of the cost allocation provisions for pipeline services in New Zealand is set out in the box below.

**Box 6.2 Cost allocation approach example**

In New Zealand, the allocation of costs that are not directly attributable to particular services (shared costs) follow one of two approaches depending on the circumstances.

The generally applicable approach is the accounting based allocation approach (ABAA). Under this approach, shared costs are allocated based on causal factors in which a factor influences the utilisation of an asset or an operating cost being incurred, or on proxy factors (generally a proportion of a quantifiable measure) where causal based allocators are not available.

The optional variation to the accounting based allocation approach (OVABAA) can be applied in situations where applying the ABAA might unduly deter investments in unregulated services. This is where the proportion of shared costs allocated to unregulated services is reduced to the amount at which investments in unregulated services would no longer be unduly deterred. The underlying policy rationale appears to be that, wherever an investment can make a contribution to shared costs, then the investment is in the benefit of consumers and should proceed.

The Commerce Commission of New Zealand has recently removed the option of applying all non-avoidable shared costs to regulated services when unregulated revenue or shared costs are below certain materiality thresholds. This was done

<sup>131</sup> ERA, *Draft decision on proposed revisions to the access arrangement for the Goldfields Gas Pipeline*, 17 December 2015, pp. 292-344.

<sup>132</sup> For instance, rule 77 does not address the rolling forward of a partially allocated capital base, rule 93 does not allow for asset allocation across covered and uncovered capacity and rule 104 refers to "incremental services" as a result of pipeline extensions or expansions, but the NGR does not clearly define them.



so that efficiency gains from the supply of regulated and unregulated services together could be shared with consumers of regulated services.<sup>133</sup>

Source: Commerce Commission of New Zealand, *Information disclosure for electricity distribution businesses and gas pipeline businesses: categorizing and allocating operating costs and asset values, information disclosure seminar hand-out*, March 2013.

Distribution pipeline service providers have discretion under rule 94 to define tariff classes and charging parameters within a set of constraints in the process of setting tariffs.

In practice, distribution pipeline service providers have tended to use the approved reference tariffs as the actual prices for services although there is no requirement to do so.<sup>134</sup> This could be the result of any, or a combination, of the following factors:

- considerations or impacts over-hanging from previous regulation by jurisdictional regulators
- a desire to limit negotiations outside the parameters established by the access arrangement
- the role of retailers for small customers in price setting.

In addition to setting reference tariffs, rule 97 sets out that reference tariffs may change during an access arrangement period in accordance with the reference tariff variation mechanism included in the access arrangement. The rule does not specify the particulars that should be included in a reference tariff variation mechanism. Nor does it include requirements around process for the approval of variations to the reference tariffs.

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<sup>133</sup> Commerce Commission of New Zealand, Input methodologies review decisions, *Topic paper 3: The future impact of emerging technologies in the energy sector*, 20 December 2016.

<sup>134</sup> The AER approved reference tariffs are also used as service tariffs for the Victorian Declared Transmission System.



### **Question 15      Tariffs**

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

### **6.5.2      Non-tariff conditions**

In addition to establishing reference services and reference tariffs for those services, an access arrangement must include certain non-tariff elements.<sup>135</sup> The key non-tariff elements include:

- Specification of non-tariff terms and conditions of access. All access arrangements are required to include the non-tariff terms and conditions relevant to the use of the reference services (for full access arrangements, rule 4(1)(d)) or for pipeline services (for limited access arrangements, rule 45(1)(b)). There are no guiding requirements or principles to assist service providers or regulators in forming or assessing the terms and conditions.
- Queuing requirements are required for transmission pipelines and only included in access arrangements for distribution pipelines if required by the regulator. The queuing requirements set out a process that will be used by the service provider to set an order of priority between prospective users of spare or developable pipeline capacity.<sup>136</sup>
- Capacity trading requirements. Under rule 105 access arrangements for both full and light regulated pipelines are required to include information on transferring capacity between pipeline users. Similarly, rule 106 requires an access

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<sup>135</sup> Where relevant, these terms and conditions will reflect jurisdictional requirements on service standards and safety.

<sup>136</sup> Rule 103 of the NGR.



arrangement to provide for the transfer of receipt or delivery points and specify under what conditions this may occur.

- Review submission date and revision commencement date. With the exception of full access arrangements made on a voluntary basis and competitive tender process pipeline access arrangements, access arrangements do not expire (rule 49). Instead, access arrangements are revised or varied. Accordingly, each access arrangement must include a review submission date and revision commencement date. These dates set when the next proposed revisions to the access arrangement are to be submitted to the regulator and the intended date that the approved revised access arrangement would commence. This determines the length of the access arrangement period. The date for revisions to an access arrangement can be brought forward according to the operation of a trigger event included in the access arrangement as provided by rule 51.
- Extension and expansion requirements.<sup>137</sup>

**Question 16      Non-tariff conditions**

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

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<sup>137</sup> Issues regarding the extension and expansion requirement provisions have been discussed elsewhere in this chapter.



## **7 Lodging a submission**

The Commission published a notice under s. 81 of the NGL for this review on 16 May 2017. It now invites written submissions to be lodged online by 22 August 2017.

Where practicable, submissions should be prepared in accordance with the Commission's Guidelines for making written submissions.<sup>138</sup> The Commission publishes all submissions on its website subject to a claim of confidentiality.

Electronic submissions must be lodged online via the Commission's website, [www.aemc.gov.au](http://www.aemc.gov.au), using the "lodge a submission" function and selecting the project reference code GPR0004. The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

All enquiries on this project should be addressed to Sherine Al Shallah by email ([sherine.alshallah@aemc.gov.au](mailto:sherine.alshallah@aemc.gov.au)) or phone ((02) 8296 7889).

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<sup>138</sup> This guideline is available on the Commission's website [www.aemc.gov.au](http://www.aemc.gov.au)



## Abbreviations

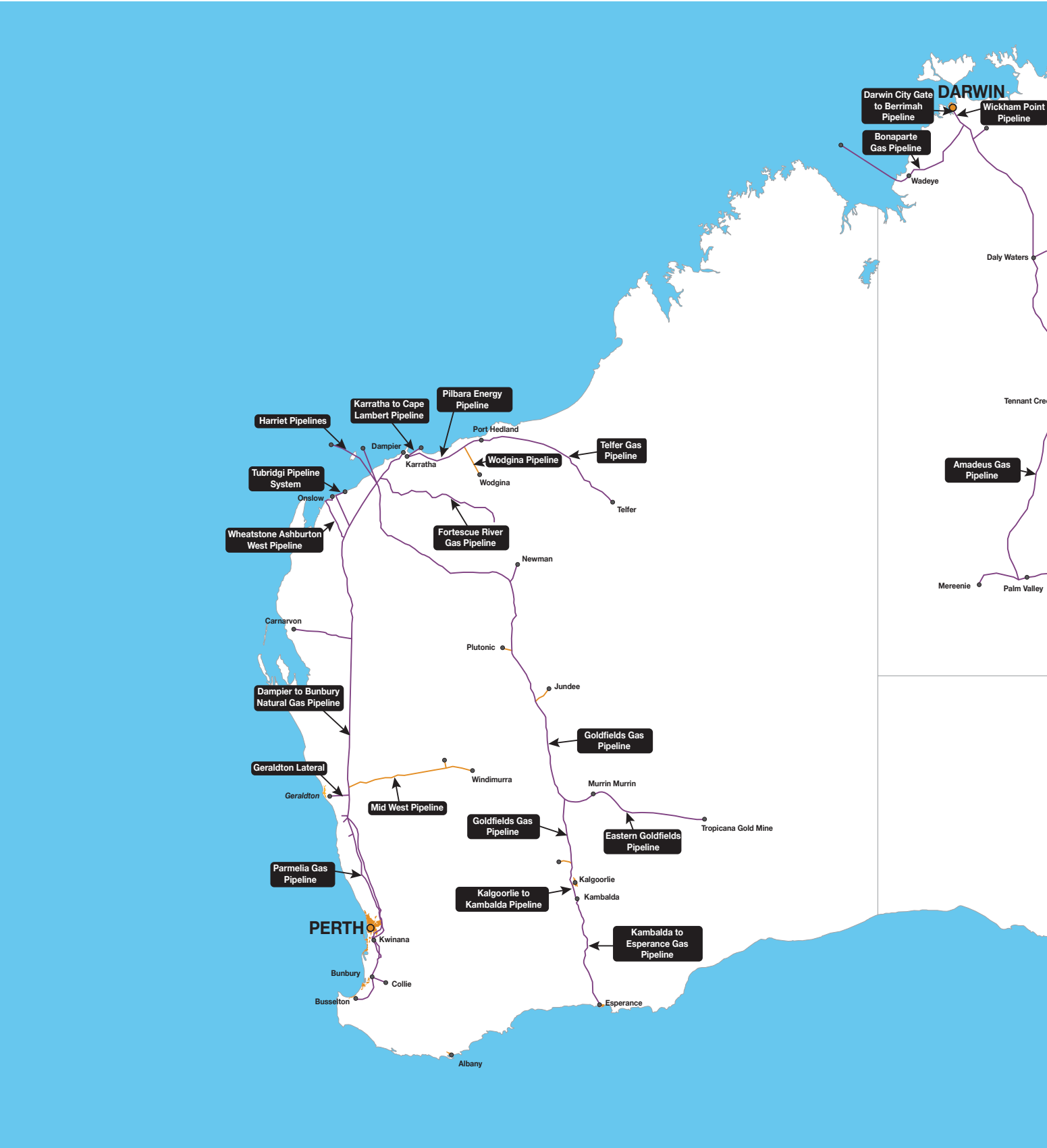
AEMC	Australian Energy Market Commission
ACCC	Australian Competition & Consumer Commission
AER	Australian Energy Regulator
Code	National third party access code for natural gas pipeline systems
Commission	See AEMC
ERA	Economic Regulation Authority of Western Australia
GMRG	Gas Market Reform Group
GTA	gas transport agreement
NER	National Electricity Rules
NGO	national gas objective
NGL	National Gas Law
NGR	National Gas Rules
NCC	National Competition Council
covered pipeline	pipeline that is covered under the NGL and NGR
scheme pipeline	pipeline that is covered under the NGL and NGR, or international pipeline that is exempt from price regulation
non-scheme pipeline	pipeline that is not covered under the NGL and NGR
full regulation pipeline	pipeline that is covered under the NGL and NGR and that has not applied for light coverage or has not satisfied the light coverage test (form of regulation test)
light regulation pipeline	pipeline that is covered under the NGL and NGR and that is subject to a light coverage determination by the NCC

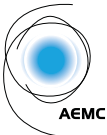






Appendix A: Map of transmission and distribution pipelines in Australia





**LEGEND**

- Transmission pipelines
- Proposed transmission pipelines
- Distribution pipelines

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.



