

Standing Committee of Officials of the
Ministerial Council on Energy

2006 Legislative Package:
Initial National Gas Rules

November 2006

Table of Contents

Glossary	1
Abbreviations	1
Relevant Publications.....	2
Overview	3
The Initial National Gas Rules (NGR)	4
Part 1: Preliminary	5
Part 2: AER to Provide Information, and Promote Informed Discussion, on Regulatory Issues	5
Part 3: Competitive Tendering Processes	5
Part 4: Access Arrangements	5
Part 5: Facilitation of, and Requests for, Access	6
Part 6: Access Disputes	7
Part 7: Decision-Making Model.....	7
Part 8: Price and revenue regulation.....	7
Advice from Allen Consulting Group Attachment A.....	15

Glossary

Abbreviations

AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Expert Panel	Panel established by MCE in December 2005 to advise on a model to achieve a common approach to transmission and distribution revenue and network pricing across electricity and gas (Final Report delivered April 2006– see below for internet link to the report)
Gas Code	Schedule 2 to the <i>Gas Pipelines Access (South Australia) Act 1997</i> (the National Third Party Access Code for Natural Gas Pipeline Systems)
GPAL	Gas Pipelines Access Law – Schedules 1 and 2 to the <i>Gas Pipelines Access (South Australia) Act 1997</i> , including "Third party access to natural gas pipelines" (Schedule 1) and the Gas Code (Schedule 2)
MCE	Ministerial Council on Energy
NEL	National Electricity Law, Schedule to the <i>National Electricity (South Australia) Act 1996</i>
NER	National Electricity Rules – Statutory Rules made under Part 7 of the NEL
NGL	National Gas Law, Schedule to the new <i>National Gas (South Australia) Act 2007</i>
NGR	National Gas Rules – Statutory Rules made under Chapter 7 of the NGL
SCO	Standing Committee of Officials reporting to MCE

Relevant Publications

MCE Statement of Approach – A New Legislative Framework for Gas, September 2005 (Statement of Approach)

<http://www.mce.gov.au/index.cfm?event=object.showContent&objectID=51EB99E6-FE2A-8D19-FF72A7C97121A7AD>

MCE "Response to Key Issues Raised in Submissions to the Statement of Approach to the Development of the New National Gas Laws and Rules"

<http://www.mce.gov.au/index.cfm?event=object.showContent&objectID=409F0422-D257-A8DF-34E3098CCCE679B4>

Productivity Commission Review of the Gas Access Regime, June 2004

<http://www.pc.gov.au/inquiry/gas/finalreport/index.html>

MCE Response to the Productivity Review of the Gas Access Regime, May 2006 (PC Response)

<http://www.mce.gov.au/index.cfm?event=object.showContent&objectID=1657B707-AD38-B43A-5CE8B8C11AFBE8E2>

MCE Decision on Review of Decision-Making in the Gas and Electricity Regulatory Frameworks, June 2006

<http://www.mce.gov.au/index.cfm?event=object.showContent&objectID=839F2DC1-AE13-142E-8425FEF5F2E8C822>

Final Report of the MCE Expert Panel on Energy Access Pricing, April 2006

<http://www.mce.gov.au/index.cfm?event=object.showContent&objectID=B0F3AD4C-A1C6-28DB-CB9CC594D2B88090>

MCE Arrangements for Consumer Advocacy in the Energy Sector, December 2005

<http://www.mce.gov.au/index.cfm?event=object.showContent&objectID=2CB6A5A9-EDA6-E716-FD118AA822DD7665>

Energy Market Reform Bulletin No 68 – Release of MCE Statement of Scope – A National Legislative Framework for Gas and Electricity

<http://www.mce.gov.au/index.cfm?event=object.showContent&objectID=C1CF57E4-D8A3-3039-E47E5E40C3F58B8A>

Overview

This document seeks to explain the National Gas Rules (NGR) as part of the new legislative framework, proposed by the Ministerial Council on Energy (MCE), which will replace the existing gas access regime. This document should be read with the earlier documents released by Standing Committee of Officials (SCO) on 7 November 2006 entitled: *Overview and Response to Expert Panel on Energy Access Pricing and Explanation of the Gas Legislative Framework*. In particular, stakeholders are directed to pages 3-4, 31-32 and 44-47 of the *Gas Legislative Framework* document outlining the legislative structure, rule change process and heads of power for the National Gas Rules.

The initial NGR will be made by the South Australian Minister on the recommendation of the MCE. An exposure draft of the initial NGR has been released for consultation with this paper. They will be formally made by the South Australian Minister when all the new Commonwealth, State and Territory application Acts for the gas access regime are brought into force. The initial NGR will be gazetted in South Australia as provided by section 310 of the NGL.

Once made, the NGR will be subject to the rule change process in the NGL. That process is administered by the Australian Energy Market Commission (AEMC).

Western Australia's complementary gas legislation will apply the initial set of NGR, as made by the South Australian Minister. In applying the NGR, Western Australia will deem all references to the AER to be references to the Economic Regulation Authority.

SCO invites comment on the draft rules from stakeholders by Friday 12 January 2007.

The Initial National Gas Rules (NGR)

Similar to the National Electricity Law (NEL) regime, the NGR will be statutory rules sitting underneath the NGL. The new NGR will, to some extent, take the place of the current Gas Code.

The Gas Code was previously a law of Parliament as a schedule to the *Gas Pipelines Access (South Australia) Act 1997* but, unlike most other legislation, could be amended by an executive process of Ministerial agreement. For the new governance arrangements to take effect, a new split between NGL and NGR has been necessary.

This was discussed in the *Statement of Approach* released by SCO in September 2005 and the *Statement of Scope* released by SCO in July 2006, and is further elaborated on in this paper and the *Gas Legislative Framework* paper released on 7 November.

To the extent that an obligation is not in the NGL, the NGR will largely be based on the current Gas Code but will be made consistent with the new governance and institutional arrangements. Additionally, important policy changes resulting from the MCE Response to the Productivity Commission *Review of the Gas Access Regime* and the Expert Panel Report will be incorporated.

As with the transfer of the National Electricity Code to the National Electricity Rules (NER), a key drafting concern for the NGR is to ensure that the drafting of the Rules reflected their nature as statutory rules setting out clearly defined rights, obligations and some processes. The drafting of the Gas Code in lengthy paragraph form with non-binding overviews before each chapter was not considered to be best practice for the initial NGR. Accordingly, the emphasis has been on reducing the concepts in the Gas Code to their core aspects and removing conflicting and overlapping layers of objectives, principles and considerations. Redundant clauses and elements of detail that conflict with the national gas objective and the revenue and pricing principles have been removed consistent with the Expert Panel advice (see Attachment C of the Expert Panel Report).

Subject to the changes outlined above, the initial NGR have attempted to be consistent with the intent of the original Gas Code. Accordingly, the level of detail that the AEMC has prescribed for electricity transmission revenue regulation would be a fundamental shift for the initial NGR and has not been attempted. SCO is mindful that the AEMC engaged in extensive consultation on developing the detail of the transmission revenue rules and was working from a base of consistent regulation developed by the Australian Competition and Consumer Commission under their Statement of Regulatory Principles for Electricity Transmission Revenue Regulation. The approach of officials in the initial NGR is not intended to limit future development of the NGR through the AEMC rule change process. Officials have taken high level guidance from the AEMC's approach, where possible, to increase consistency and commonality, reflecting the common revenue and pricing principles that guide the electricity and gas regimes.

Part 1: Preliminary

This part contains formal provisions and definitions.

Part 2: AER to Provide Information, and Promote Informed Discussion, on Regulatory Issues

This part establishes the Australian Energy Regulator's (AER) role of providing information to and requesting submissions from, the public to promote informed discussion of regulatory issues. The provisions are designed to promote stakeholder involvement in developing the AER's approach to regulatory issues in the gas regime.

This part mirrors the role of relevant regulators to undertake and promote public consultation and discussion under s 2.1 of the Gas Code.

Part 3: Competitive Tendering

This part contains requirements for service providers to meet when seeking an approval of a competitive tender process from the AER under Part 3.3 of the NGL.

These requirements include:

- the content of an application to the AER for approval of a tender process as a competitive process;
- requirements of which the AER must be satisfied before it approves a competitive tender process; and
- details as to what must be included in a report to the AER on the conduct of a tender process under s 101(2)(b) of the NGL.

These requirements have been developed having regard to the requirements for competitive tendering processes under the National Access Regime in Part IIIA of the *Trade Practices Act 1974*. The policy is that:

- the application must set out key details required for the AER to assess the tender process (rule 7);
- the acceptance criteria must ensure that the tender process will be open, fair and result in the tenderer being able to choose the tender that will result in the best terms and conditions of access for users (rule 8); and
- the report back on the tender process must clearly show that the tender was conducted in accordance with the approved process and that the successful tender was selected in accordance with the approved selection criteria.

This part replaces and updates ss 3.22 and 3.28 of the Gas Code.

Part 4: Access Arrangements

This part contains further details of the content of access arrangements, specifically with regard to queuing requirements and extension and expansion requirements. This part elaborates on Part 4.3 of the NGL.

Rule 10 updates s 3.13 of the Gas Code relating to queuing by removing the redundant references to principles that are captured by the national gas objective. The drafting of the 'non-discrimination' principle for queuing builds upon the NGL test

for additional ring-fencing requirements (s 120) and associate contracts (s 124). The requirements also reflect the fact that a first-come-first-served or public auction process are the only ways of allocating spare or developable capacity currently being used consistent with the Gas Code.

Rule 11 updates the requirements of s 3.16 of the Gas Code, relating to extensions and expansions. SCO would appreciate comment on whether rule 11(2) should be part of the NGL or remain in the rules.

Section 3.6 of the Gas Code required the terms and conditions for the supply of reference services to be reasonable. This clause has not been specifically replicated because s 27 of the NGL requires the AER to consider the national gas objective when exercising its functions. It was not considered that an additional reasonableness test added anything useful to the AER's analysis.

A rule on capacity trading, similar to ss 3.9-3.10 of the Gas Code, was not included as the requirements have been moved to s 167 of the NGL. Accordingly, capacity trading requirements will not be subject to amendment by rule change.

The ability to require submission of a revised access arrangement before a 'review submission date' on the occurrence of a trigger event, similar to the in s 3.17 of the Gas Code, has not been replicated in the rules. The definition in s 129 of the NGL is considered to be adequate as it requires the review submission date to be a specified date. SCO would appreciate submissions on whether or not a review submission date should be triggered by specified events in the new regime.

Similarly an extended definition of 'access arrangement expiry date,' which replaces the term 'access arrangement period' in s 3.18 of the Gas Code, has not been included in the rules as the definition in s 129 of the NGL is considered adequate. SCO would appreciate submissions on whether or not the requirements of s 3.18 of the Gas Code should continue in the new regime.

Part 5: Facilitation of, and Requests for, Access

This part sets out further detail about what must be included in information provided to the public and how it is to be provided. It largely replicates Part 5 of the Gas Code.

Rule 12 creates a requirement that access arrangement information that must be provided by service providers under s 189 of the NGL is to be provided in a timely fashion. This rule replaces ss 5.1 - 5.3 of the Gas Code.

Rule 13 replaces s 5.8 of the Gas Code. This rule gives details on the information that must be provided by a user in response to a request for information on its unutilised contracted capacity under s 190 of the NGL. Unlike s 5.8 of the Gas Code, rule 13 also imposes a duty on the user to notify the service provider of the request and the information provided.

Rule 14 replaces s 5.9 of the Gas Code and details the information that must be recorded on a service provider's register of spare capacity (required under s 191 of the NGL).

Rule 15 provides details of what a potential user must put in a request for access to a covered pipeline, as provided by s 192 of the NGL. This rule replaces the requirement in ss 5.1(d) and (e) of the Gas Code that the service provider must

specify, to a prospective user, the information the service provider will need to consider an access request.

Part 6: Access Disputes

This part elaborates on new requirements established by s 199 of the NGL whereby in the event of an access dispute arising because of safety concerns cited by the service provider, the service provider must obtain an independent expert's report to assess this concern.

Rule 16 requires that a safety of operation notice provided to the AER under s 197 contain the name of the independent expert.

Rule 17(1) allows a user or prospective user to object to a service provider's choice of expert. Rule 17(2) requires the service provider to request that the expert have regard to all relevant statutory or regulatory requirements.

Part 7: Decision-Making Model

Rule 18 outlines a process for making regulatory decisions made under the NGL for which no process has been included in the NGL known as the "consultative decision making model". This process applies only where the Rules provide that a decision-maker is to follow this decision making process, which is set out in the Schedule to the Rules (see below).

This rule replaces various procedural requirements for decision-making in Parts 2, 4 and 6 of the Gas Code.

Part 8: Price and revenue regulation

Interpretation

Part 8 of the NGR largely replicates s 8 of the Gas Code, which provided for the determination of prices and revenue for covered pipelines. In a similar manner, Part 8 Rules will aid the AER to determine appropriate prices for reference services, and overall revenue targets, to apply in access determinations made under the NGL.

SCO Legal Working Group sought expert advice on the drafting of this part of the NGR from Jeff Balchin of the Allen Consulting Group (ACG). The ACG advice is available as Attachment A to this document.

Rule 19 provides definitions for use in Part 8 of the NGR. These definitions are generally present in the Gas Code.

The definition of "conforming capital investment" and "non-conforming capital investment" are used to replace the definition of "new facilities investment" given by s 8.16 of the Gas Code. Capital Expenditure that meets the "new capital investment criteria" established by Rule 2.7 will be considered "conforming capital investment" and will therefore be able to be rolled into the capital base for a new access arrangement period.

The definition of "operating expenditure" replaces the definition of "Non Capital Costs" established by ss 8.4(c) and 8.36 of the Gas Code. The 'capital expenditure'

and 'operating expenditure' terminology also makes the NGR more consistent with current usage and the electricity regime.

The definition of "pipeline assets" is narrower than the definition of "asset" used in the GPAL, which includes any "legal or equitable estate or interest... securities, choses in action and documents". Pipeline assets are limited to tangible capital assets used to provide reference services. This definition though is intended to include such capital assets as computer systems required to provide reference services.

Rule 20 adapts s 8.49 of the Gas Code to allow the AER to draw inferences as to whether capital or operating expenditure is efficient on any basis it considers appropriate. As under the Gas Code, the NGR requires the AER to consider public submissions on matters relevant to the drawing of an inference under this rule. The provisions of s 8.49(c), relating to a program of new capital expenditure, are captured by rule 27(3).

Access Arrangement Information

Rule 21 outlines the information required by the AER from a service provider (as part of an access arrangement proposal), in order for the AER to apply the building block methodology (itself established by Rule 25) to determine target revenue for an access arrangement period.

This information is to include the service provider's proposals/forecasts for:

- the capital base (and how it is arrived at, including, for an access arrangement that follows on from a previous access arrangement, capital and operating expenditure over the previous access arrangement period);
- capital expenditure;
- depreciation method over the period;
- operating expenditure;
- the rate of return;
- the method for dealing with taxation;
- any incentive mechanism to capture carry-over efficiency gains from a previous period;
- the approach to setting prices;
- the form of price control; and
- any pass through clause.

Assumptions used in providing this information must be justified. The NGL allows the AER to make its own assumptions about information where assumptions are used by service providers to provide it in the first instance. Regulatory information instruments under the NGL could also be used in relation to information that may be required to assist the AER in the consideration of a proposed access arrangement.

The Gas Code does not explicitly outline the information required by regulators to assess the components of total revenue. It simply states in s 8.6 that in order to determine an appropriate value for total revenue, the "Relevant Regulator may have regard to any financial and operational performance indicators it considers relevant in order to determine the level of costs within the range of feasible outcomes under s 8.4 that is most consistent with the objectives contained in s 8.1". Further, s 8.1 states that if "the Relevant Regulator has considered financial and operational performance indicators for the purposes of s 8.6, it must identify the indicators and

provide an explanation of how they have been taken into account". The new requirements of the NGR are more specific than those in the Gas Code.

Rule 22 requires the information to be provided on a real or a nominal basis, or on another basis approved by the AER, so as to facilitate the building block calculation to take into account the effects of inflation. This provision captures s 8.5A of the Code.

Rule 23 is a new rule that requires the service provider to provide a statement outlining the basis used to calculate a forecast or estimate as part of their access arrangement information. The basis must be reasonable and the forecast or estimate must be the best possible in the circumstances. Given the requirements of rule 27 and 39, officials have considered it unnecessary to require the AER to have regard to the same factors that have been developed by the AEMC for electricity transmission when assessing forecasts of operating and capital expenditure (see cll 6A.6.6(e) and 6A6.7(e) of the AEMC Transmission Revenue Rule).

Rule 24 is also a new rule that requires all extrapolated or inferred information provided to the AER to be supported by the original information from which it is derived.

Building Block Approach

Rule 25 replaces s 8.4 of the Gas Code, and in doing so explicitly establishes the "building block methodology" as the method by which target revenue is to be determined. The building block methodology is the same as the Cost of Service method provided for in the Gas Code.

The NGR removes the Net Present Value and Internal Rate of Return methods for calculating target revenue (or total revenue) used in s 8.4 of the Gas Code, which are conceptually identical to the building block or Cost of Service method.

The methodology is thereby clarified to involve the determination of:

- a capital base
- depreciation of the capital base
- annual return on capital for the year
- the cost of corporate income tax
- any adjustments for an incentive mechanism
- a forecast of operating expenditure

The components listed above can be considered to comprise the building blocks or components of the efficient costs of a network service provider. In combination with the revenue and pricing principles in s 21 of the NGL, this Rule can be read as ensuring that the target revenue should be set to be equal to the sum of these building blocks.

The Capital Base

Rule 26 establishes the process by which the Capital Base for a pipeline subject to an access arrangement must be calculated. Rule 26 considers four categories of pipeline that may need to have a Capital Base calculated:

- 1) pipelines that have never had an initial capital base (ICB) calculated and were commissioned before the commencement of the NGR

- 2) pipelines that have never had an ICB calculated and were commissioned after the commencement of the NGR
- 3) pipelines currently subject to an access arrangement (and therefore have a calculated capital base) that are having a new access arrangement finalised to take effect on the expiry of the current access arrangement
- 4) pipelines that have already had a capital base calculated, but which currently have no applicable access arrangement in force (i.e. pipelines that were once covered, but have since become uncovered or subject to light regulation).

Pipelines in category 1 above have their ICB calculated according to Rule 26(1)(a), which applies the relevant provisions of the Gas Code. The relevant provisions of the Gas Code are ss 8.10-8.13, and therefore the new regime involves no change in circumstances for the particular pipelines in this category. Accordingly the interpretation of those provisions established by the Western Australian Supreme Court and Full Federal Court¹ will be preserved for existing pipelines that still require the calculation of an initial capital base.

Pipelines in category 2 above have their ICB calculated according to Rule 26(1)(b), which uses the actual construction cost of the pipeline plus capital expenditure since commissioning, less depreciation and assets disposed of. This Rule is equivalent to the requirements applying to new pipelines under ss 8.12 and 8.13 of the Gas Code, except that they apply only for pipelines commissioned since the commencement of the NGR, rather than for pipelines commissioned since the commencement of the Gas Code.

Rule 26(2) applies to pipelines in category 3 above, which is essentially equivalent to ss 8.9 and 8.14 of the Gas Code in combination. The principle remains that the capital base of a pipeline at the expiry of an access arrangement will be the capital base at the beginning of that access arrangement period, less depreciation and assets disposed of, plus capital expenditure that meets the relevant criteria and can therefore be rolled into the capital base.

Rule 26(3) applies to pipelines in category 4 above. This class of pipeline includes pipelines that have had a light regulation determination revoked and hence are becoming subject to an access arrangement. This circumstance was not possible and therefore not provided for under the Gas Code, as there were no light regulation pipelines.

However, an equivalent circumstance was possible under the Gas Code but was not adequately provided for. The Gas Code is uncertain in dealing with pipelines that had once been covered, had had its coverage revoked, and then became covered once more.

Rule 26(3) is therefore a new rule and covers off both of these circumstances, removing the uncertainty present in the Gas Code. Rule 26(3) allows for the roll in of all capital expenditure since the capital base was determined for the purposes of a previous access arrangement.

At this stage, actual asset valuations for pipelines under the Gas Code have not been locked in by the Rules as has been done by the AEMC for electricity transmission (see cl S6A.2.1(c)) but SCO would welcome comments on whether this would be appropriate as a transitional issue.

¹ Re Michael; Ex parte Epic Energy (WA) Nominees Pty Ltd (2002) 25 WAR 511 and ACCC v Australian Competition Tribunal [2006] FCAFC 83 (2 June 2006) respectively.

Rule 27 sets out the “new capital investment criteria” to determine whether capital expenditure by a service provider during an access arrangement period may be rolled into the capital base for the next access arrangement period. The new capital investment criteria replace the New Facilities Investment criteria in ss 8.15 – 8.17 of the Gas Code.

Rule 27 incorporates a slight change from the previous New Facilities Investment criteria. The Gas Code required the relevant regulator to determine whether the amount of capital expenditure "does not exceed the amount that would be invested by a prudent Service Provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering Services".

By contrast, Rule 27 requires the AER to be satisfied that "the amount of the expenditure must not exceed the amount that would be invested by a service provider acting efficiently, in accordance with good practice in the industry, and with the objective of achieving the lowest sustainable cost of delivering services". The concept of a "prudent service provider" has been removed from the criteria but is still a relevant consideration in applying the criteria (see rule 27(3)(c)).

There has also been a slight change to the third "limb" of the "three limb" test established by s 8.16(a)(ii) of the Gas Code and now in Rule 27(2)(b). The third limb now includes a situation where investment is "necessary to maintain *or improve* the safety and integrity of services, or to maintain the service provider's capacity to meet contractual obligations or provide services". This more effectively captures reliability and maintenance arrangements for both contract carriage and market carriage pipelines.

Sub-rule 27(3) also captures the concepts in ss 8.49(b) and (c) about assessing new facilities investment.

Rule 28 allows the AER to make a determination that proposed capital expenditure will meet the new capital investment criteria (and therefore may be rolled in to the capital base for future access arrangement periods). It replicates s 8.21 of the Gas Code and is designed to provide certainty to service providers wishing to engage in new capital expenditure.

The principle of this clause is essentially unchanged, with a decision to approve future capital expenditure as meeting the criteria being binding on the AER. The NGR does change from the Gas Code in terms of the public consultation requirements. The NGR gives the AER discretion as to whether to engage in public consultation on these matters, whereas the Gas Code required the relevant regulator to treat an application under s 8.21 as a revision to an access arrangement, with mandatory consultation requirements. This accords with the advice of the Expert Panel (p 71).

Rule 29 replaces ss 8.23 & 8.24 of the Gas Code. It allows users to contribute to a service provider's new capital investment. This allows users to fund extensions and expansions that the service provider is not willing to fund.

This rule also allows capital contributions made by a user to be rolled into the service provider's capital base in the same way as if the service provider made the capital expenditure. In other words, capital contributions made by a user must meet the new capital investment criteria under rule 27 in order to be rolled into the capital base.

This policy is unchanged from the Gas Code, where capital contributions were to be considered as any other New Facilities Investment, and therefore were only rolled into the capital base where they met the criteria in s 8.16.

Rule 30 clarifies that a service provider may make investment that does not conform to the new capital investment criteria even though that service provider may be subject to an access arrangement.

Rule 31 replaces ss 8.25-8.26 of the Gas Code relating to the levying of surcharges by service providers on users. Subsections 8.26(a) and (b) are, however, captured by rule 32, which states that a non-conforming capital expenditure may be added to a speculative investment account unless it is recovered through a surcharge.

Rule 32 replaces s 8.19 and ss 8.26(a) and (b) (see above) of the Gas Code. It allows a service provider to place non-conforming capital investment, that is not recovered by a surcharge, into a notional speculative investment account. The terminology has been changed from that used in the Gas Code, which referred to a "speculative investment fund". As under the Gas Code, if an investment put into a speculative investment account at some time in the future meets the capital investment criteria, it can be rolled into the capital base at that point.

Rules 33 and 34 replace ss 8.27 and 8.28 of the Gas Code respectively, which relate to capital redundancy. The policy contained in these rules is essentially unchanged from that in the Gas Code. Under the NGR:

- service providers may include in an access arrangement a mechanism to ensure that assets that cease to contribute to the delivery of services are not reflected in the service provider's capital base;
- the AER may require a service provider to include a capital redundancy mechanism in an access arrangement;
- the AER must consider the uncertainty that requiring or approving such a mechanism would cause for users, prospective users and the service provider; and
- assets that have been classified as redundant and removed from the service provider's capital base may, in future, be rolled into the capital base as new capital investment if they begin to contribute to the delivery of services.

Rate of Return

Rule 35 replaces ss 8.30-8.31 from the Gas Code, and requires the AER to have regard to prevailing market conditions and risks when determining a service provider's rate of return for use in the building block calculation.

Depreciation

Rules 36-38 replace ss 8.32-35 of the Gas Code, relating to depreciation. Rule 36 replaces s 8.32 of the Code. Rule 37 differs from ss 8.33-8.34 owing to the removal of the Internal Rate of Return and Net Present Value methods of analysis from the Gas Code methods of calculating total revenue (referred to as "target revenue" in the NGR).

Rule 37 also changes the wording contained in s 8.33(a) of the Gas Code, which stated that a depreciation schedule should be designed to result in reference tariffs that change over time "in a manner that is consistent with the efficient growth of the

market for the services provided by the pipeline". Rule 37(a) aims to "promote efficient growth in the market for reference services".

Rule 38 replicates the policy contained in s 8.35 of the Gas Code.

Operating Expenditure

Rule 39, in combination with the definition of "operating expenditure" in rule 19, replicate ss 8.36-8.37 of the Gas Code. The Gas Code principle of operating expenditure only being expenditure used in the provision of reference services is retained. The test for including operating expenditure in the building blocks calculation over an access arrangement period has been changed from that in the Gas Code, in a similar manner to the new investment criteria/New Facilities Investment criteria changes described above.

The Gas Code required the relevant regulator to determine whether operating expenditure "would not be incurred by a prudent Service Provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service" when considering whether to include it in calculating total revenue.

The NGR employs a slight change in the wording of the test, requiring the AER to determine whether "the proposed expenditure is as an efficient service provider acting in accordance with good practice in the industry, and with the objective of achieving the lowest sustainable cost of delivering services, would be expected to incur". A reference to the expenditure being 'prudent' is now an explicit criterion in rule 39(1)(b).

Control Mechanisms

Rules 40 and 41 require an access arrangement to include a control mechanism over prices and revenue to determine forecast revenue such that it may be designed to be equal to target revenue. Rules 40 and 41 are essentially new rules, though they capture the intention of s 8.2 of the Gas Code (particularly paragraphs (a), (b) and (c)), and other relevant provisions of s 8 of the Code.

The net effect of these rules is that the forecast revenue of a service provider over an access arrangement period is designed to be equal to target revenue, which in turn is designed to be equal to return on capital, return of capital (depreciation) and efficient costs under rule 25. The net effect of rules 25, 40 and 41, together with the incentive mechanism provided for in rule 42, is to uphold revenue and pricing principle (2) in s 21 of the NGL

Incentive Mechanisms

Rule 42 captures the intent of, and simplifies, ss 8.44-8.46 of the Gas Code, relating to incentive mechanisms. Rule 42(2) captures s 8.46(e) of the Gas Code, and thereby the key principle that an efficiency mechanism must allow for the carryover of efficiency gains from one access arrangement period to the next.

The various objectives of an incentive mechanism in s 8.46 have been removed. The inclusion of the overarching national gas objective in the NGL makes these unnecessary, and will guide the AER in assessing the appropriateness of a particular incentive mechanism.

Fixed Principles

Rule 43 replaces ss 8.47-8.48 of the Gas Code. These provisions create certainty for service providers by fixing principles declared in an access arrangement to be fixed, in a manner binding on the AER, for a period that may extend over two or more access arrangement periods. As under the Gas Code, a fixed principle may not be varied or revoked without the consent of the service provider. The concepts of "structural elements" and "market variable elements" in s 8.48 have been removed.

Variation of reference tariff

Rule 44 is a new rule that allows an access arrangement to provide for a variable reference tariff. This rule introduces the concept of a "cost pass through" event, which is defined in advance and can result in an alteration to a reference tariff as part of an access arrangement.

Schedule of Decisions subject to process in s 18

The Schedule to the NGR outlines the decisions under the NGL for which the consultative decision making model outlined in rule 18 will be applied. Officials would be open to any suggestions as to whether additional decisions under the NGL or rules (such as consultation on regulatory information orders in s 46 of the NGL) should be added to this schedule.

Advice from Allen Consulting Group Attachment A

National Gas Rules

Principles and best practice application

The economic principles that underpin the Code's pricing provisions can be summarised as follows. The relevant objective is taken as the pursuit of economic efficiency – which is consistent with the proposed objective for the NGL/NGR.

- *Prices should allow recovery of cost* – the revenue that is received from the set of regulated services should recover the (efficient) cost of providing those services, where efficient cost in this contest is used to refer to the lowest cost of providing the particular bundle of services. 'Cost recovery' is necessary to ensure that there is a continued incentive (and capacity) for investment in the activities.
- *There should be incentives for cost-efficiency* – if revenue is tied too closely to cost, then the incentive for cost minimisation is limited. Hence it is important for the regime to make the service provider responsible (in part) for the costs that it incurs (e.g. by ensuring that revenue responds with a lag to changes in cost). This principle will imply that the first principle may not be met precisely (at least in an *ex post* sense), but rather that the entity may over or under-recover cost.
- *There should be incentives for other dimensions of efficiency* – there are a number of other dimensions to economic efficiency for which financial incentives (delivered through prices/revenues) may perform a role, which include incentives for the:
 - efficient level of service; and
 - efficient use of the services.

The current 'best practice' for applying these principles in Australia involves a series of sequential steps (with some feedback). It is important to understand that the mechanism that is used to achieve the third of the principles above may differ between distribution and transmission. These 'best practice' steps and mechanisms, and the more important differences between distribution and transmission, are as follows:

- First, to determine the target or allowed level of revenue from the sale of the set of regulated services, which is set equal to the forecast cost of providing the regulated services over the regulatory period (including a return on capital).
 - The current 'best practice' approach for forecasting cost over the regulatory period is what is known as the 'building block approach', which involves forecasting firm-specific expenditure requirements and demand, and calculating cost as the sum of a return on capital (including on forecast capital expenditure), depreciation (again, including depreciation on the forecast capital expenditure), operating expenditure and possible also an amount that provides a continuation of the benefit from efficiency gains made in the previous regulatory period.

- As noted above, one of the economic principles is that prices not include recovery of inefficient expenditure (which economists treat as equivalent to a monopoly rent). The tools for assessing efficiency are discussed further below.
- A further debate that has occurred over recent years is whether the ‘rate of return’ should be set at an unbiased estimate of the cost of capital associated with the regulated project, or whether there should be some degree of ‘erring’ in favour of the regulated business. A related question is whether mechanisms may exist to reduce the potential for variation in the rate of return across regulatory periods for reasons unrelated to movements in the true cost of capital. This matter is also expanded upon below.
- Secondly, to determine the form of the price control(s) that is to be set over the regulated prices tariffs.² The main issue is whether a structure for prices will be determined by the regulator or whether the regulated business will be provided with discretion or flexibility over the setting of individual prices over the regulatory period (subject to meeting a constraint on its prices overall). The objective for the two is the same: if the regulator determines the price structure, then it should seek to determine the structure that is consistent with providing efficient signals for the use of the infrastructure. If pricing flexibility is to be provided, then the form of the control should be set so as to provide the regulated business with a financial incentive to set efficient prices for the use of the infrastructure. This is a matter upon which the approach for distribution and transmission may differ.
 - For distribution, it is the role of prices to encourage efficient use, although much of the role of distribution prices is to recover fixed costs that do not vary with use (and hence price discrimination between end-users is important to minimise any distortion on usage). For this reason, it is common for distributors to have some flexibility over pricing and for a price control to be set that is designed to provide an incentive for improving the efficiency of pricing (i.e., to be encouraged to find more efficient means of charging).³
 - For transmission (Victoria aside), capacity rights are created and tradeable. The trade in capacity rights is intended to provide the incentive for scarce pipeline capacity to be traded to its most efficient use. The role of the price structure is to *support* this trade rather than to provide an efficient signal on its

² A ‘price control’ is the formal algebraic control that applies over prices (or tariffs). The simplest form of price control is an approved schedule of prices (which may be fixed, or simply escalated annual according to observed inflation and possibly offset by a preset real price reduction). An alternative is to set a control over the set of regulated prices in combination, rather than to control each price individually, which then provides flexibility for the regulated entity over the setting of individual prices (i.e. a myriad of individual prices can be set provided that, in combination, the prices satisfy the control). A revenue cap, average revenue cap (revenue yield), hybrid price control and tariff basket (weighted average price cap) and all examples of a form of price control that provide the regulated entity with flexibility over the setting of individual prices subject to a cap on the prices in aggregate.

³ Where the form of price control places a control over the movement of prices in combination rather than individually (i.e., pricing flexibility is introduced, subject to the need for prices in aggregate to meet an overall cap), then an annual regulatory approval of prices is required. This process, however, need only be a very simple process (with no need for consultation etc).

own – which is achieved by recovering most of the cost from the sale of the capacity rights (with only a small variable element related to variable costs). An implication is that pricing flexibility is neither necessary nor desirable.

- Thirdly, to set the level of the control over prices such that expected revenue equates with the overall target, in present value terms. This requires forecasts of the relevant dimensions of demand to forecast the revenue from different levels of the control. Once the decisions are made for steps 1 and 2 and a forecast of demand is obtained, then this step is reasonably mechanical.
- Fourthly, to determine other incentive arrangements that may operate over the next regulatory period, including those that may have an effect in a future period in order to stimulate behaviour over the next regulatory period. Two mechanisms are particularly important, namely a mechanism to encourage cost efficiency and a mechanism to encourage the provision of an efficient level (or quality) of service.

— *Incentives for cost efficiency* – the main incentive for cost efficiency that is provided is to set prices at a level that is independent of cost for a period (typically 5 years). As prices are fixed, cost-reducing activities generate higher profits. One of the problems with this incentive mechanism, however, is that the reward for a cost reducing initiative diminishes over the regulatory period and an incentive for deferring efficiency gains may result (i.e. the benefits from reducing cost are passed on to customers from the time that prices are reset to cost, hence as the time to the price review draws near, the period over which the efficiency benefit is retained by the provider falls). One means of addressing this problem – i.e. attempting to provide a continuous incentive to reduce costs – is to permit some of the efficiency gains that were made during one regulatory period to be ‘carried over’ into the next (with an emphasis on carrying over more of the gains made towards the end of the regulatory period). The design of these efficiency carry-over arrangements is a complex task, however, where refinements/innovation in the form of the incentive arrangement continues to be made.

- : Setting prices independent of cost may impose risk on the service provider from unanticipated changes in cost. It is common (and appropriate) for the service provider to be permitted (required) to pass-through the effects of cost changes that result from matters that are prescribed at the previous price review and that are outside of the control of the service provider (e.g. changes in some forms of taxation, a requirement to increase service levels).⁴

A further important mechanism for providing incentives for cost efficiency is to ignore service providers’ actual financing decisions to the extent possible when setting regulated prices. The term ‘financing decision’ refers to decisions on matter such as the amount of debt the business has, the level of dividend payments that are made and the amount that is paid when purchasing a new

⁴ Where a cost ‘pass through’ is permitted, a regulatory process for assessing the pass through is required. However, as this process would involve deciding whether the event giving rise to the pass through had occurred and then whether the quantum of pass through is appropriate, the assessment process should be simple and quick.

regulated business. It is ‘best practice’ regulation to use a benchmark assumption for financing decisions, which is the notional value or notional decision that would be made by an efficient firm in the position of the regulated business (and where all benchmark assumptions are internally consistent).

- *Incentives to ensure the efficient level of service is provided* – whenever regulated businesses are provided with the incentive to minimise cost, it is essential for a countervailing measure to be applied to ensure that cost is not minimised at the expense of the level (quality) of service. However, the role required of explicit financial incentives depends upon the other measures may already be in place.
- : For distribution, one of the effects of safety regulation is that high performance is already required for many dimensions of service – although there remain important dimensions of service for which financial incentives may have a role.⁵ Accordingly, the optimal design of the financial incentives should take account of the effect of existing regulation – and would be expected to do less than would be required if there was no safety regulation. The financial incentive could be provided by requiring the regulated price for all customers to change to reflect the actual level of service that is provided, or by requiring a separate payment to be made to specific customers who suffer from adverse levels of service (i.e. effectively a price reduction for a particular customer).⁶
- : For much of transmission, users obtain contractual rights to pipeline capacity from the provider, the terms and conditions for which typically include service obligations (‘standard’ terms and conditions are approved as part of the access arrangement). It has not been common for these service obligations to be supplemented with further financial incentives.

One of the main activities for the regulator during a price review is to determine the level of expenditure that should be included in the target revenue for the next regulatory period (and to exclude inefficient expenditure). The service provider typically has a financial incentive to overstate the *future* expenditure requirements – this is the consequence of rewarding the provider for reducing cost in order to create the incentive for cost-efficiency. The current ‘best practice’ is to rely on the incentive that is provided to the service provider to reduce cost to presume that actual expenditure has been efficient – and to use this presumption to assist in assessing the forecast of expenditure.

⁵ This matter was assessed by the Victorian ESC in 2002, where it was concluded that financial incentives should apply in relation to multiple outages for individual customers and the duration of outages for individual customers, as well as to the time taken to connect new customers.

⁶ A regime that requires payments to be made where there are adverse events means that the scheme would generate an expected cost for the provider (i.e. the best it can do is to make no payments, but there is a chance that it will make some payments, and so it will incur a cost, on average). Accordingly, where such a regime is implemented, an addition to the revenue target that is determined in step 1 to reflect this expected cost would be required.

- *For operating expenditure* – it is reasonable to assume that the future annual operating expenditure requirements are consistent with past levels. Hence, if it can be presumed that the observed level of expenditure at the end of the previous period is efficient, then the regulator can set this level as the starting point for the forecast of expenditure for the next regulatory period. The regulator’s task of assessing whether the forecast of operating expenditure for the next regulatory period is a reasonable forecast can then be reduced to considering the factors that may cause operating cost to change from the observed ‘efficient’ level (such as expected changes in input prices, changes to the business’ obligations, etc).
- *For capital expenditure* – if it can be presumed that the level of capital expenditure over the previous regulatory period was efficient, then the regulator is justified in including that expenditure in the regulatory asset base as at the commencement of the next regulatory period. However, it is difficult to draw strong conclusions about future capital expenditure requirements from past trends in efficient capital expenditure, and so the assessment of whether the forecast of capital expenditure for the next regulatory period is a reasonable forecast remains a complex task.

In the discussion above it was noted that financial incentives (if effective) may be relied upon to presume that *actual (historic)* expenditure was efficient, and that information on whether actual (historic) expenditure was efficient may in turn simplify the task of assessing expenditure forecasts. However, it is a challenging task to design the ‘perfect’ incentive regime (and not one that has as yet been achieved), and so it is important that the regulator has the *capacity* to undertake an administrative test of the efficiency of past expenditure (operating or capital) to address perverse responses to the incentive regime is important.⁷

- The term ‘administrative test’ is used to refer to the situation where the regulator makes a direct assessment of whether a particular project or expenditure level was efficient,⁸ drawing upon the advice of experts where appropriate. This is not a simple task for a regulator to undertake as it requires an exercise of judgement on matters for which a regulator is not well equipped or informed. Moreover, administrative tests of efficiency expose the service provider to risk that may not be necessary and may give rise to perceptions of unnecessary levels of intrusion into the provider’s operational decisions. Hence, administrative tests of efficiency should be used as a fallback only where necessary.⁹

⁷ As an example, a perverse response would be to increase the level of expenditure from that required in the last year of the regulatory period in order to inflate the forecasts for the next regulatory period (for example, by advancing expenditure from the next year).

⁸ This test is often expressed as testing whether the expenditure or decision was ‘prudent’ or ‘prudent and efficient’ or consistent with ‘good industry practice’. The important character of the test referred to here is that the decision maker places itself in the same position as the service provider was when the latter made the relevant decision (e.g. to undertake a particular project) and that account is not taken of changes (such as market movements) that may have taken place since that time.

⁹ A second alternative would be to use benchmarking techniques to compare a service provider’s expenditure against the actual expenditure of peer firms. This involves gathering data of expenditure and other relevant inputs (such as output and environmental factors) from a large group of comparable firms and to employ econometric techniques to adjust for the factors that would result in cost differences between firms (e.g. size of outputs, whether the soil type is predominantly sand or

A further technique that has been raised as a possible mechanism for providing incentives for efficiency in relation to capital costs (and also ensuring that customers do not pay for inefficiency) is to remove (or threaten to remove) physical assets from the regulatory asset base where the use of the asset has changed adversely. Various terms are used to describe this process, including re-optimisation, asset stranding or capital redundancy, but the common theme of all is that the service provider is required to bear the consequences of an adverse change that took place subsequent to the investment having taken place. The consensus in Australia is that ‘asset stranding’ is not appropriate as a general tool of incentive regulation as it exposes investors to substantial risk while not creating incentives that are superior to the mechanisms described above (the latter of which impose less risk).¹⁰

A theme of the above discussion is that information on actual expenditure is a crucial input into setting regulated prices. It follows that it is imperative for regulators to have the power to collect the information and to investigate transactions that may obscure the level of expenditure incurred (for example, the effect of transactions between related parties). Similarly, it is also important for the regulator to be able to investigate the effects of these types of arrangements when considering forecasts of expenditure.

As noted above, a further debate over recent years has surrounded whether the ‘rate of return’ that is applied to investment should be upward (or downward) biased to take account of the concern that the risk of understating (overstating) the rate of return outweigh the risk of understating (overstating) it. A related debate has concerned whether a degree of ‘inertia’ should be applied between reviews over inputs into the estimation of the WACC over which there is substantial statistical uncertainty (the concern being that the lack of precision in parameter estimates could give rise to substantial variation in rates of return merely from different interpretations of the same set of data). Our views on these matters are as follows:

- *Upward (downward) bias in the allowed revenue* – it should be possible for the regulator to adopt a figure that departs from the central (or unbiased) estimate of each of the relevant inputs, after considering the costs and risks of under and overstating the allowed revenue. This is consistent with the conclusions of the Expert Panel, who emphasised that this assessment should be undertaken having regard to the circumstances of each case (rather than there being a broad presumption), be symmetric and (implicitly) not directed solely to assessments of the rate of return.
- *Inertia in WACC parameters* – it should be possible for regulators to adopt a presumption that the previous WACC-inputs would continue (i.e. rebuttable but

granite, etc). However, the usefulness of benchmarking exercises for *regulatory purposes* is questioned by many informed commentators – most notably because of the large error margins that exist even where there is a large set of firms for which observations can be drawn (which is a view with which we agree). In Australia, the paucity of data on firms’ actual expenditures presents another hurdle to the use of benchmarking for regulatory purposes at present.

¹⁰ That is, limited situations may exist where asset stranding delivers benefits that exceed the risk created.

only if the evidence is persuasive), where these inputs are subject to substantial statistical uncertainty. This is consistent with regulatory practice.¹¹

Lastly, one of the recommendations of the Expert Panel was for further investigation of a 'Total Factor Productivity' (TFP) control setting method. The TFP method would imply a different approach to steps 1 and 3 above. In particular, step 1 would involve setting prices in line with cost at the commencement of the new regulatory period and step 3 would involve determining the rate of change in prices over the regulatory period with reference to an estimate of TFP. Forecasts of firm-specific expenditure and demand over the regulatory period would not be required. The TFP control setting method has not been implemented in Australia as yet. Step 2 (choosing the form of price control) and step 4 (determining incentive arrangements and other matters) would remain, although the form of any carry-over with respect to cost-efficiency would need to be revised.

- The Expert Panel concluded that the TFP approach has the potential to improve price regulation in some instances (which I agree with), but that further work is required to flesh out how the regime would operate in practice and also to obtain reliable TFP estimates.

Operation of the current Code and areas that require reform

When considered against the principles of 'best practice' principles and mechanisms discussed above, the pricing provisions in section 8 of the current Code have operated reasonably well to date. Relevantly, the pricing provisions in the current Code have:

- effectively mandated the use of a building block approach (I consider this to be the combined effect of sections 8.4, 8.20 and 8.37);
- encouraged the implementation of financial incentives for cost-efficiency (i.e. the ability to implement the 'price path' approach in section 8.3 and the encouragement to implement 'incentive mechanisms' in sections 8.2, 8.44-8.45) and permitted the regulator to rely upon the effect of incentive mechanisms when assessing prudence/efficiency (section 8.49);
- prescribed the method for updating the value of the regulatory asset base at successive price reviews (8.9), with 'capital redundancy' (asset stranding) only permitted if conditions are met (namely, that the principles for determining redundancy are announced at the previous price review and factored into the rate or return or depreciation – section 8.27) and with it implicit that the regulatory asset base should not to be adjusted if the asset is sold (i.e. consistent with ignoring financing decisions);
- permitted the use of a form of price control that allows price flexibility and that has a simple annual price approval process (section 8.3A-8.3H), and also permits a predetermined cost pass-through clause with a simple approval process (also section 8.3A-8.3H); and
- permitted the regulator to make binding commitments about how it would exercise its discretion or judgement on certain matters at future reviews through approving

¹¹ It is also consistent with the AEMC's Second Draft of the Revenue Setting Rules (clause 6A.6.2(j)(4)).

‘Fixed Principles’ (sections 8.47-8.48) that have, for example, permitted regulators to lock in incentive mechanisms in advance of the regulatory period to which they apply.

There are, however, a number of matters where improvements to the current provisions could be made in light of the matters referred to above. Putting aside for one moment the question of whether the regulator’s power should be restricted to only rejecting the service provider’s proposed rate of return if it is outside of a reasonable range (which is discussed further below), the two key (interrelated) defects in the pricing provisions of the Code at present are as follows:

- *Excessive flexibility* – the Code has been drafted to permit many different approaches to setting regulated prices, with the only constraining factor that prices have to be set with reference to cost. As a consequence, while ‘best practice’ approaches – namely, approaches that provide strong incentives for efficiency gains – are permitted rather than mandated, inappropriate approaches (such as ‘rate of return’ regulation of the style that historically characterised US utility regulation) are also permitted. The quality of the direction to regulators would be improved by removing the options that are not ‘best practice’.¹²
- *Alternatives/choices are implicit rather than explicit* – one consequence of the excessive degree of flexibility in the Code is that the choices on offer are implicit rather than explicit, and often not obvious from a reading of the Code. By way of example, section 8.3 provides the option for adopting a price control that provides the service provider with pricing flexibility during the regulatory period and also provides the option of implementing a cost pass-through mechanism, but neither of which is clear from the drafting. The quality of the direction that is provided by the Code would be improved if the options available were made explicit, and also addressed in a more appropriate part of the provisions.

The areas where improvements are possible include the following:

- *Removal of the ‘propose-respond’ model for the rate of return* – the Expert Panel was particularly critical of the application of a presumption in favour of accepting the rate of return that was proposed by the service provider, including that it was the choice of the service provider as to which method was used to estimate the rate of return.
- *Increase the emphasis on using incentive compatible regulation* – the Code currently requires the regulator to form a view on the prudence of (past) operating and capital expenditure, although it permits the regulator to use incentive mechanisms to assist in this task (which is achieved by the obscurely drafted section 8.49). A ‘best practice’ approach would reverse the emphasis and make reliance on incentive mechanisms the preferred method of assessing prudence and leave administrative assessments as a fallback.¹³ The specific areas where amendment should be contemplated are as follows:

¹² In the discussion below, the non-best practice options that we recommend being removed have not (to the best of our knowledge) been employed in any event.

¹³ The AEMC has proposed to preclude an administrative assessment of capital expenditure when updating the regulatory asset base in its Second Draft of the Revenue Setting Rules.

- Remove the ability to implement the ‘cost of service approach’ that is referred to in section 8.3(a) – this approach would mean that prices are adjusted every year or more frequently as cost changes, and so would provide little financial incentives for cost-efficiency.¹⁴ By deleting section 8.3(a), the only option available is for the price control to be determined and not reopened for the duration of the regulatory period (except on a limited basis if a pass-through clause is adopted, or possibly in whole if a seriously adverse event occurs). This is appropriate and could simply be set out as a requirement – in any event, the setting of a price control for a defined period has been adopted in every Australian regulatory decision in gas and electricity to date. The remainder of section 8.3 could then be simplified to make it clear precisely what choices are being made available (and, preferably, with the same clauses moved to a part of the new Rules that is more relevant), that is:
- : Section 8.3(b) would become redundant, as the only option available when section 8.3(a) is deleted is what would be referred to as a ‘price path approach’.¹⁵
 - : Section 8.3(c) is offering the choice of a form of price control that permits pricing flexibility during the regulatory period, as opposed to having a schedule of prices approved and determined for the regulatory period. Hence, this provision is dealing with the choice over the *form of price control*, rather than the question of whether prices should be fixed independent of cost for a period. There is no reason to deal with this matter in the section that requires the price control to be fixed for a defined period – the form of price control is a logically separate matter. The Code would be improved, however, by making it clear that a choice over the form of price control is required and by setting out the options that are available.
 - : Section 8.3(d) is offering the use of a cost pass-through for defined events (e.g. a change in a defined tax), which feature in most regulatory determinations and are appropriate. Again, there is no reason to deal with this matter in the section that requires the price control to be fixed for a defined period – the scope of cost pass-throughs are a logically separate matter. The Code would also be improved by making it clear that cost pass-throughs are permitted (provided that the scope of the pass through is defined at the previous price review).
 - : Sections 8.3A-8.3H basically sets out the process the regulator is required to follow when undertaking an annual approval of prices (which is required whenever a price control that provides pricing flexibility is adopted) and when assessing an application for a cost pass-through (which

¹⁴ This deletion was proposed by the Productivity Commission and accepted by the Expert Panel (Expert Panel, p.144, PC Recommendation 7.2). Note that the term ‘cost of service’ in section 8.3(a) of the Code and the use of the same term in section 8.4 refer to two entirely different things.

¹⁵ The more common term for the ‘price path approach’ is ‘price cap regulation’ or ‘CPI-X regulation’. Note that the term ‘price cap regulation’ is most commonly typically used to mean that the price control is preset for a defined period. The actual form of price control that is used could be a revenue cap.

is required whenever the scope for cost pass-throughs exists). These provisions are out of place in the midst of pricing principles.

- Re-draft the ‘prudence test’ provisions to refer to financial incentives – that is, to recognise expressly in sections 8.16(a) and 8.37 that a presumption should be made in favour of actual expenditure being prudent wherever effective incentive mechanisms are in place.
- Re-orient the ‘incentive mechanism’ clause and make the announced arrangement binding – if the ‘price path’ approach is mandated, then the ‘incentive mechanisms’ being referred to relates only to a carry-over of the benefits from gains one regulatory period to the next (under the price path approach, any gains made compared to the regulatory forecasts are retained already, and so section 8.44(a) is redundant). As this is a complex area where ‘best practice’ is still evolving, the detailed design of carry-over arrangements should remain at the discretion of the regulator. However, it is very important for the service provider to know what incentive arrangements are to apply for the period in advance (i.e. so it can respond to them). Hence, there should be a requirement for the form of the carry-over (if any) to be defined for the period in advance and then made binding upon the regulator in the next review.¹⁶
- *Delete the principles on ‘cost allocation’* – the current principles on cost allocation in the Code require the regulator to form a view on the appropriateness of the allocations, and include ‘fairness and reasonableness’ as a criterion in that assessment. This is inappropriate for two reasons:¹⁷
 - First, where the form of price control provides pricing flexibility (subject to an overall cap), the necessary implication is that the service provider is to be given flexibility over the allocation of cost at the price review and then during the regulatory period (i.e. by setting the structure and relativities of prices, the allocation of costs is determined). This is not consistent with the regulator determining the ‘correct’ allocation of costs.
 - Secondly, the inclusion of ‘fairness and reasonableness’ is not consistent with an economic efficiency objective.
- *Recognise the potential for financial incentives with respect to service levels/quality* – while these arrangements exist at present, there is no express reference to service incentive arrangements in the current draft of the Code.
- *Simplification, reducing excessive/unnecessary prescription, improving clarity* – there are a number of clauses in the current Code that are unnecessarily complex, redundant or whose meaning is unclear, and so where refinement would be appropriate. Some of the priority amendments would be:

¹⁶ To be clear, the ‘carry-over’ refers to an addition to the revenue target to reflect the gains made in the previous regulatory period. What is being said here is that the approach that will be used to determine the carry-over for that the service provider will get for its efforts in the previous period should have been defined prior to that previous period having commenced, and then be required to be applied by the regulator in the current period.

¹⁷ The Expert Panel agreed with the Productivity Commission’s proposal to delete these provisions (Expert Panel p.144, PC recommendation 7.2).

- Amending section 8.4: to refer only to what is referred to as the ‘cost of service approach’ (which I would also suggest redefining as the ‘building block approach’ to update the terminology to reflect current use and to avoid confusion),¹⁸ as the three methods set out are mathematically identical. I would also suggest deleting the reference to the method being implemented in a manner that is consistent with ‘generally accepted industry practice’ as it is not at all clear what this means and as the new objective provides sufficient guidance for the detailed implementation of the building block approach.
- Deletion of the current sections 8.5 and 8.6: the assumption that there are ‘operational and financial indicators’ that can be used to check whether the combination of the separate building blocks in aggregate meet the objectives is flawed (and now is seldom undertaken). Indeed, as presently drafted, there is a view that the provisions merely permit the regulator to exercise a discretion that is largely unguided, reducing the certainty for investors intended from the direction contained elsewhere in the pricing provisions.¹⁹ The reason for examining the separate components of the regulated entity’s costs is because such an examination is the only means of assessing the adequacy of revenue overall.
 - : An option would be to replace sections 8.5 and 8.6 with a clause that permits the regulator to weigh up the costs (including risk) of over and under-investment and over or under-utilisation of infrastructure when deciding on each of the individual cost inputs (i.e. to insert the clause the Expert Panel recommended into the new Rules). Importantly, this assessment would operate at the level of each parameter (although probably have most operating in relation to the rate of return) and be based upon an assessment of the evidence of these costs that is presented to the review.
- Clarifying when *actual* expenditure and when a *forecast* of expenditure is required: the provisions in the Code at present are somewhat confused as to whether and when actual or forecast expenditure is required. If the building block approach is mandated and the price control is required to be set for a defined period (as discussed above), then three logically separate decisions about expenditure are required:
 - : **Assessment of the prudence and efficiency of actual capital expenditure** – the process of updating the regulatory asset base requires a decision about whether all of the *actual* capital expenditure that was

¹⁸ The term ‘cost of service’ in the US implies is a simile for ‘rate of return’ regulation and, for gas transmission, generally also refers to a specific method for calculating depreciation and for allocating costs between users. Hence, using the term to refer to the use of the building block approach has the potential to create confusion.

¹⁹ A number of regulators in the past have examined the ‘financial indicators’ that are implied by different revenue levels. However, if the actual financing decisions of the entities are ignored, then such analyses generally yield no additional information that is relevant to the assessment of the adequacy of revenue overall (such assessments may assist to test the consistency of the estimated cost of debt financing with the benchmark level of gearing that is assumed for the regulated entity, but this is a matter that is of relevance only to the estimation of the rate of return).

undertaken during the previous regulatory period should be included in the regulatory asset base.

- : **Assessment of the forecast of capital expenditure** – the building block approach requires a *forecast* of capital expenditure in order to forecast the required ‘return on assets’ and depreciation allowances over the forthcoming regulatory period.
- : **Assessment of the forecast of operating expenditure** – the building block approach requires a *forecast* of operating expenditure over the forthcoming regulatory period. No assessment of the prudence of actual operating expenditure should be required, except to the extent that it is incidental to forecasting operating expenditure (i.e. if historical expenditure is to be used as the starting point for the forecast of operating expenditure).

The structure of the Code provisions would be improved by dealing with these matters separately.

- Principles dealing with surcharges / capital contributions – these provisions are amongst the most complex in the current Code and could benefit and are not even well understood by service providers and regulators. These provisions would benefit from a re-write that explains more clearly the scheme that is intended.
- Improve the structure of the Chapter – as discussed above, there are a series of defined steps and choices available when setting regulated charges. The readability of the Chapter would be improved by describing the steps and structuring the chapter around those steps.

One further matter that has not been commented upon above is the principles dealing with setting the opening regulatory asset base (or initial capital base) for a pipeline that was in existence prior to the Code coming into effect (i.e. as provided for in sections 8.10 and 8.11). The decision on the initial capital base was the issue that was at the heart of the *Epic* matter and was a significant issue on the *EAPL* matter, both of which related to pipelines constructed before the commencement of the Code. These provisions were only transitional and different principles apply to the setting of the initial capital base for pipelines constructed subsequent to the commencement of the Code. The different treatment of pipelines constructed subsequent to the commencement of the Code is for reason that the latter were built in the knowledge of the regime and the owners could arrange their affairs and collect information relevant to pipeline valuation on that basis.

For the pipelines that were constructed prior to the commencement of the Code, our view is that the provisions of the Code – as applied in practice and as interpreted by the Courts – for the most part have not been inconsistent with sound economic principles. I note that economic principles at best provide a range at which irreversible investments that were undertaken in the past should be valued at the commencement of a new regime. This is because those investments have little opportunity cost, and

hence would continue to be used in their current activity even if a very low value is set for the assets.²⁰ In particular, I would comment as follows.

- The implicit proposition in the current Code that the regulator is required to make what is essential a public policy decision – and take account of such factors as reasonable expectations – is appropriate. I do consider, however, that the list of factors is excessive and not all mutually exclusive.
- The role of a DORC valuation (under section 8.10(b)) is probably underweighted – the WA Supreme Court interpreted the requirement for DORC to *normally* set the upper limit to the valuation as having very little import. DORC is the value that would exist in a competitive market (and generate prices consistent with those that would be charged by a hypothetical new entrant), and so prices that are above this level (one definition) can be concluded to contain monopoly rent. Accordingly, I consider that there should be greater emphasis on DORC setting the upper limit – for example, to set the upper limit except in exceptional circumstances.

— However, where prevailing prices are consistent with a valuation that is well below the DORC, economic principles do not provide strong grounds for raising prices to be consistent with a DORC valuation.

- In contrast, the role of a DAC valuation (under section 8.10(a)) is overweighted. DAC valuations are not generally very meaningful and have not had a substantial effect on the setting of the initial capital bases for gas pipelines.
- The criterion that has been problematic in the Code is the requirement to take account of a recent purchase price. A requirement to have regard to purchase prices is inconsistent with the principle of ignoring the service provider's financing decisions, and in this case, risks having customers underwrite bad decisions by investors. I note, however, that, when the WA Supreme Court required the WA regulator to have regard to the price that Epic paid for the Dampier to Bunbury Pipeline, it also required the regulator to consider whether the price that it paid had been 'reckless'. The regulator did in fact conclude that the price paid was 'reckless', and hence the relevance of the purchase price was downgraded.

²⁰ In contrast, for new investments, unless a commercial return is provided (and a return of the investment over its life), then the incentive for investment will not exist. It is also the case that a perceived unreasonable or capricious valuation of past investments may lead investors to expect similar unreasonable or capricious exercise of discretions in the future, and hence have a negative impact on investment incentives. However, the point at which a decision would become unreasonable or capricious and so affect future investment cannot be determined with precision.