energy networks association

Submission to the Independent Competition and Regulatory Commission

Review of Access Arrangement for ActewAGL Natural Gas System

Response to Draft Decision

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Overview

The Energy Networks Association (ENA) welcomes the release of the Independent Competition and Regulatory Commission's (ICRC) *Draft Decision – Review of access arrangement for ActewAGL natural gas system in ACT, Queanbeyan and Yarrowlumla* (Draft Decision).

The ENA has critical areas of concern with the ICRC Draft Decision. The Draft Decision is the first consideration of a proposed Access Arrangement for a gas distribution network following a series of recent appeal rulings on the National Gas Code. These rulings by the Australian Competition Tribunal have established a number of key principles which regulatory authorities must consider in future assessments of Access Arrangements under the Code.

The Draft Decision does not appear to have adequately considered the implications of these recent appeal rulings for the ICRC's assessment of ActewAGL's proposed Access Arrangement. A failure to consider the implications of these appeal rulings appears to have led to the ICRC misconceiving its role as being one of 'determining' an appropriate rate of return, rather than assessing and responding to ActewAGL's proposed Access Arrangement. This misconception and other elements of the ICRC's regulatory approach leads to an appreciable risk that the ICRC's Final Decision may be inconsistent with elements of several recent appeal rulings.

The low weighted average cost of capital (WACC) estimate adopted by the ICRC in its Draft Decision is inconsistent with the risk characteristics of the ActewAGL gas distribution network. The real pre-tax WACC of 6.82 per cent is low in comparative terms in view of both past decisions of Australian regulatory authorities and comparable international bodies. The low cost of capital preferred by the ICRC is also inconsistent with advice on an appropriate WACC range provided by NECG – a member of the ICRC's own panel of expert consultants.

A third area of core concern with the ICRC Draft Decision is the high risk of regulatory error and underinvestment which is created by the low cost of capital estimate. The asymmetric risk and consequences of regulatory error and underinvestment has recently been highlighted by the Productivity Commission in its Final Report of its *Review of the Gas Access Regime*, as well as prior reviews of the overarching national access regime. The release of the Final Report of the *Review of the Gas Access Regime* provides the ICRC with an important opportunity to ensure its Final Decision is constructively informed by the most comprehensive and independent review of the gas access regime to date. The risk of underinvestment flowing from regulatory error and access prices which are set too low has also recently been highlighted by a number of other key stakeholders, including the WA Supreme Court in its 2002 judgement *Re: Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* and by NSW Treasury in the context of the recent NSW electricity distribution pricing review.

Background

This submission responds to the Independent Competition and Regulatory Commission *Draft Decision – Review of access arrangement for ActewAGL natural gas system in ACT, Queanbeyan and Yarrowlumla* issued in July 2004.

The Energy Networks Association is the national representative body for gas and electricity distribution network businesses. Energy network businesses deliver electricity and gas to over 12 million customer connections across Australia through approximately 800 000 kilometres of electricity lines and 75 000 kilometres of gas distribution pipelines. These distribution networks are valued at more than $30 billion, and each year energy network businesses undertake capital investment of more than $2 billion in network reinforcement, expansions and greenfield extensions.

Consistency of Draft Decision with recent appeal rulings

The Draft Decision appears to contain significant potential legal errors flowing from a lack of consistency with recent rulings of the Australian Competition Tribunal.

The Australian Competition Tribunal has recently delivered three significant rulings directly relevant to the ICRC's task of assessing ActewAGL's proposed Access Arrangement. These ruling are:

- *Application of GasNet Australia (Operations) Pty Ltd* in relation to a decision by the ACCC to draft and impose an Access Arrangement for the Victorian gas transmission system owned by GasNet Australia (*GasNet*) – December 2003
- *Application of Epic Energy South Australia Pty Ltd* in relation to a decision by the ACCC to draft and impose an Access Arrangement for the Moomba-Adelaide Pipeline System – December 2003
- *Application by East Australian Pipeline Ltd* in relation to a decision by the ACCC to draft and impose an Access Arrangement for the Moomba-Sydney Pipeline System – July 2004.

These decisions establish important principles that provide critical guidance for regulatory authorities applying the National Gas Code. These principles are not adequately reflected in the Draft Decision.

The ENA considers that there is an appreciable risk that several aspects of the Draft Decision are fundamentally inconsistent with the interpretation of the National Gas Code provided by these three rulings. In particular, the ENA considers that the ICRC may have erred in the Draft Decision by:

- mischaracterizing its task under Section 8.30-8.31 of the National Gas Code incorrectly as one which requires the ICRC to 'set' or 'determine' a rate of return
- failing to consider approval of ActewAGL's proposed rate of return as one which falls in a legitimate and plausible range open to a service provider to propose

- failing to consider approval of the proposed cost of capital component of the proposed Access Arrangement because it did not accord with ICRC's 'preferred' cost of capital estimate.

These issues are discussed in more detail below.

Task of regulatory authorities under Sections 8.30-8.31

The ICRC Draft Decision states in the summary of the reasons underlying its approach on cost of capital that:

> The Code requires the commission to determine a rate of return on capital which is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the reference service.[1]

Section 8.30-8.31 of the National Gas Code contains no such requirement to 'determine' a rate of return, nor can support for this statement be found elsewhere in the text of the Code or its interpretation by appeal bodies. The role of the regulator with respect to cost of capital estimations under Sections 8.30-8.31 was a substantive issue in the *GasNet* matter, where the Australian Competition Tribunal concluded:

> Contrary to the submission of the ACCC, it is not the task of the Relevant Regulator under s 8.30 and s 8.31 of the Code to determine a 'return which is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Service'. The task of the ACCC is to determine whether the proposed AA in its treatment of Rate of Return is consistent with the provisions of s 8.30 and s 8.31 and that the rate determined falls within the range of rates commensurate with the prevailing market conditions and the relevant risk.[2]

The approach adopted by the ICRC Draft Decision is difficult to reconcile with this Tribunal ruling. In particular, the Draft Decision uses language which makes clear that the ICRC's misconception of its task carried through its decision-making process, referring to the:

- ICRC being required to 'determine' a rate of return[3]
- rate of return 'set' by the ICRC[4]
- weighted average cost of capital approach 'chosen' by the ICRC[5]; and
- the ICRC's 'preferred values' for cost of capital calculations.[6]

Under the gas access regime it is the role of the regulator to *assess* a proposed Access Arrangement (including its Reference Tariffs which are based in part on an underlying cost of capital estimate) for consistency with the objectives and principles of the National Gas Code, in particular Sections 3.1-3.16, Section 2.24, Sections 8.1-2 and Section 8.30-8.31. Unlike the National Electricity Code, the National Gas Code

[1] Independent Competition and Regulatory Commission, *Draft Decision – Review of access arrangement for ActewAGL*, 19 July 2004, p.xix
[2] *Application of GasNet Australia (Operations) Pty Ltd* [42]
[3] ICRC (July 2004), p.xix
[4] ICRC (July 2004), p.xix
[5] ICRC (July 2004), p.xix
[6] ICRC (July 2004), p.xix

provides the regulator with no right or duty to 'determine' a rate of return. Under the 'propose-respond' model established in gas access regime regulatory bodies have the more limited function of assessing a proposed Access Arrangement for consistency with the provisions of the National Gas Code.

Elements throughout the Draft Decision indicate that the ICRC has potentially made a fundamental error of regulatory approach inconsistent with the operation of the National Gas Code by misconceiving its task as one of 'setting' a rate of return. The ENA considers that an appropriate remedial response to this potential error is for the ICRC's Final Decision to fully consider the consistency of ActewAGL's proposed WACC range and its specifically proposed WACC, which draws on substantive and credible market evidence, with the objectives and pricing principles of the gas access regime. In this regard closer attention to the relevant provisions of the National Gas Code, rather than the theoretical preferences of the ICRC, is required.

Failing to approve a cost of capital estimate falling in a legitimate range

Estimation of the cost of capital for any business using existing models provided by financial economics (such as the Capital Asset Pricing Model) is an area where there is universally acknowledged to be significant scope for uncertainty and measurement error. Point estimates of costs of capital typically have large standard deviations and are sensitive to several input parameters which are not directly observable.

The lack of certainty surrounding cost of capital estimates, which has been widely recognised by principal contributors to the CAPM theory, leads to high risks of potential regulatory error in cost of capital decisions and means that precise point estimates of cost of capital parameters must be arrived at with significant caution.[7]

In the *GasNet* matter the Tribunal commented that:

> It is clear in the reasoning in *Michael* that there is no single correct figure involved in determining the values of the parameters to be applied in developing an applicable Reference Tariff. The application of the Reference Tariff Principles involves issues of judgment and degree. Different minds, acting reasonably, can be expected to make different choices within a range of possible choices which nonetheless remain consistent with the Reference Tariff Principles. Where the Reference Tariff Principles produce tension, the Relevant Regulator has an overriding discretion to resolve the tensions in a way which best reflects the statutory objectives of the Law. However, where there are no conflicts or tensions in the application of the Reference Tariff Principles, and where the AA proposed by the Service Provider falls within the range of choice reasonably open and consistent with Reference Tariff Principles, it is beyond the power of the Relevant Regulator not to approve the proposed AA simply because it prefers a different AA which it believes would better achieve the Relevant Regulator's understanding of the statutory objectives of the Law.

The ICRC Draft Decision does not establish in its statement of reasons that the WACC range proposed by ActewAGL falls outside of the range of choices reasonably open and consistent with the Reference Tariff Principles of the Code. In fact, ActewAGL has provided substantive evidence to support its proposed cost of capital

[7] See for example the findings by Fama and French that standard errors of more than three per cent per year are typical for both CAPM and related models. Fama, E and French, K 'Industry costs of equity', *Journal of Financial Economics* 43 (1997) p.153-193

estimate, falling in the range of 7.62-8.22 per cent (pre-tax real), including a study by Network Economics Consulting Group, one of ICRC's own expert panel of consultants.[8] The ICRC has instead sought to establish its own 'preferred' approach or 'draft position' cost of capital issues, clearly on the basis that this better achieves its understanding of the objectives of the regime.[9]

In ENA's view the ICRC has failed to appropriately consider the requirements of the National Gas Code with respect to establishing a rate of return for ActewAGL's gas distribution assets.[10] In particular, the Commission has failed to provide an explanation of how its approach to determining 'preferred' rates of return and failing to consider the approval of the WACC range proposed by ActewAGL is consistent with the *GasNet* ruling. Appropriately applying the National Gas Code and integrating the outcome of the *GasNet* ruling would, in ENA's view, require ICRC to either:

- approve a WACC value in the range proposed by ActewAGL and supported by a member of ICRC's own expert panel of consultants (NECG); or
- provide substantive and detailed evidence which clearly establishes that all values in the proposed range fell outside a legitimate range reasonably open to a service provider on basis of existing market evidence (after accounting for known measurement uncertainty).

The ENA considers that the ICRC would be acting beyond its powers were it to fail to approve a proposed Access Arrangement and Reference Tariffs when these fall within the range of choices reasonably open to the service provider and consistent with the Reference Tariff Principles in 8.1-2 simply because it 'prefers' a different Access Arrangement which it believes would better achieve its conception of the objectives of the regime.[11]

Approach to cost of capital estimation

The estimated weighted average cost of capital included in the Draft Decision of 6.82 per cent (real per-tax) is one of the lowest cost of capital estimates for gas or electricity distribution networks in Australia. It also represents a low estimate when compared to relevant international decisions.

Comparison of Australian and international rates of return

Since the introduction of energy access pricing regimes Australian regulatory authorities have been consistently and systematically reducing real cost of capital estimates. Evidence establishes that this trend is resulting in Australian regulatory authorities adopting assumptions regarding the risk characteristics of gas distribution businesses which are less conservative than other regulatory bodies.

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[8] http://www.icrc.act.gov.au/aboutus/expertpanelofconsultants2003to2008.html
[9] ICRC (July 2004), p.xix and p.162
[10] For example, Section 10.1 'Code Requirements' fails to consider implications of the GasNet ruling, or mention the potential relevance of Section 2.24 of the Gas Code where a regulator is balancing conflicting elements in Section 8.1-2 of the Code. See *Re: Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231, [136]
[11] *Application of GasNet Australia (Operations) Pty Ltd* 29, ICRC (July 2004), p.xix

In September 2003 the Network Economic Consulting Group released its *International comparison of WACC decisions*. The NECG study is the most comprehensive comparison and analysis of Australian and international cost of capital decisions made to date. It is lengthy and detailed, and covers a number of infrastructure sectors, surveying over 100 regulatory decisions across Australia, the United States, the United Kingdom, Canada, France, Ireland, the Netherlands and New Zealand. For the purposes of assessing the Draft Decision, the results of analysis undertaken in relation to the electricity and gas distribution sector regulated by the ICRC are extremely relevant and significant.

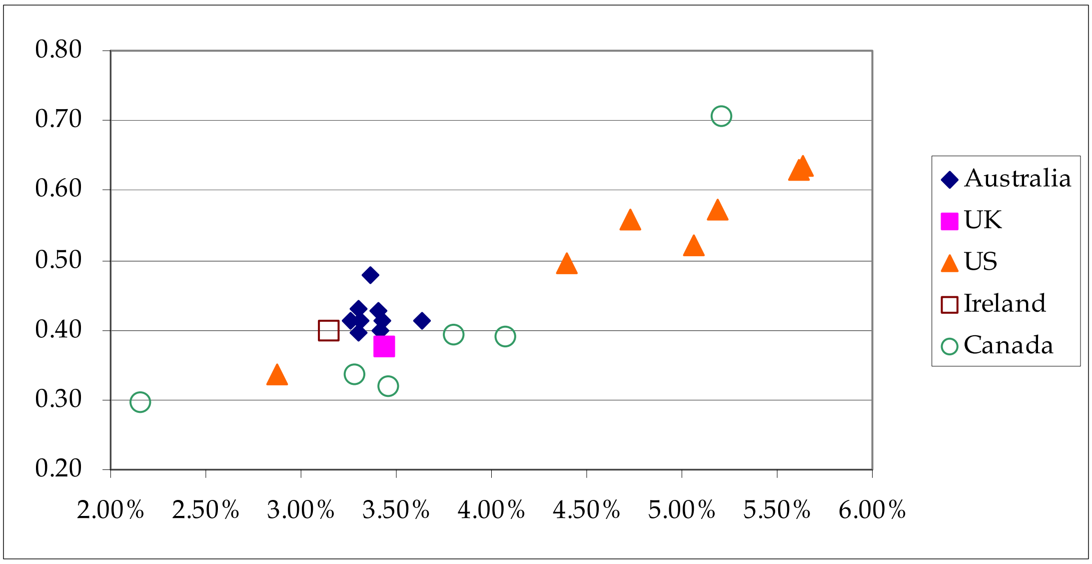
The NECG study concluded in relation to gas distribution sector decisions:

> Figures 10 and 11 show the Australian decisions in general provide (unadjusted) margins over the risk free rate that are broadly equivalent to those calculated for Canada, but significantly lower than those in the US. The Irish and UK decisions are broadly comparable to the Australian decisions when the adjustment factor is applied.[12]

The study illustrates (See Figure 1 below) that in relation to regulatory decisions in the Australian gas distribution sector on the assumed cost of capital (x-axis), and the key asset beta assumption (y-axis), there is no basis to conclude that regulatory decisions have been either 'generous' towards investors or 'conservative' (in favour of protecting investment) in the estimation of cost of capital in internationally comparative terms.

This comprehensive and widely based survey of international rates of return casts significant doubt on the approach and outcome adopted by the Draft Decision and emphasises the need to ensure that appropriate conservatism is adopted in the estimation of the overall cost of capital.

Figure 1 - Gas distribution – adjusted vanilla WACC and asset beta[13]



[12] Network Economics Consulting Group *International comparison of WACC decisions*, September 2003, p.73
[13] Network Economics Consulting Group *International comparison of WACC decisions*, September 2003, p.73

Impact of extraordinary events on assessments of risk characteristics

It is noteworthy that Australian regulatory decisions on gas distribution businesses have offered lower cost of capital estimates than comparable US decisions despite a lack of evidence that risks facing energy distribution businesses are significantly lower than in the United States.

The impact which external, extraordinary events, can have on the assets and operation of energy network businesses has recently been highlighted by the Canberra bushfires. The possibility of destruction of substantial electricity and gas distribution network assets by extraordinary events is a small yet appreciable risk going forward for all energy network businesses, and is inconsistent with the benign risk characteristics which appear to have been assumed in the ICRC's assessment that a pre-tax cost of capital of 6.82 per cent is appropriate.

Risk of underinvestment and regulatory error

The Draft Decision fails to adequately consider the significant risk that underestimation of the cost of capital will result in significantly more costly outcomes for the community than erring in favour of providing adequate incentives for new and ongoing investment.

This risk has been highlighted by a series of independently commissioned reviews, judicial rulings and government stakeholders.

Productivity Commission Review of the Gas Access Regime

The Productivity Commission's recently completed Final Report in its *Review of the Gas Access Regime* contains a number of findings and recommendations of direct relevance to the ICRC's assessment of ActewAGL's proposed Access Arrangement.

These findings and recommendations place significant emphasis on the risks and costs of access pricing regulation and suggest practical means of mitigating these risks and costs. Findings and recommendations of relevance to the ICRC's pending Final Decision include:

- the market power of gas distribution networks can be constrained by a number of factors, including the availability of other fuel and energy substitutes[14]
- gas distribution networks serving new markets generally possess little market power – this would imply that market power in ActewAGL's area of operation is likely to be low, given the relatively short period since the development of the initial network and the introduction of natural gas to the region[15]
- the gas access regime is a form of regulation at the intrusive end of possible regulatory approaches[16]

[14] Productivity Commission *Review of the Gas Access Regime – Inquiry Report*, June 2004, Finding 2.2
[15] Productivity Commission (June 2004), Finding 2.3
[16] Productivity Commission (June 2004), Finding 3.1

- the regime has the high potential to distort the nature and timing of investment decisions[17]
- where market power is not strong, the risks and costs of regulation are likely to outweigh any potential benefits[18]
- a greater focus by regulatory authorities on the objective of promoting investment in gas networks is required[19]
- a precise replication of the outcome of a competitive market is not an achievable objective for regulatory bodies, instead regulatory decisions should seek to promote outcomes consistent with 'effective' competition[20]
- Reference Tariffs should include a return on *both* the commercial and regulatory risks that impact on service providers[21]
- setting access prices and estimating cost of capital values results in inevitable subjectivity and imprecision[22]
- there is a plausible range of values for an appropriate total revenue and a regulatory body should approve any value proposed by a service provider within that range[23]
- the right of a service provider to seek to initiate an Access Arrangement review is not an adequate mechanism to deal with the investment distorting effects of asymmetrical regulatory truncation of expected returns[24]

These findings and recommendations should be reflected in the Final Decision of the ICRC, as relevant matters for consideration under Section 2.24 (g) of the National Gas Code.[25]

The Productivity Commission's findings followed previous inquiries also focused on appropriate approaches to access pricing issues, and the need to avoid costly medium term underinvestment in key infrastructure. For example, in the *Review of the National Access Regime* (the overarching access regime) the Productivity Commission noted:

> …access arrangements should encourage regulators to lean more towards facilitating investment than short term consumption of services when setting terms and conditions…[26]

The Commission found that the asymmetric risks and costs of regulatory error and underinvestment in key infrastructure led to:

> …a strong in principle case to 'err' on the side of investors.[27]

[17] Productivity Commission (June 2004), Finding 4.3
[18] Productivity Commission (June 2004), Finding 4.5
[19] Productivity Commission (June 2004), Recommendation 5.1
[20] Productivity Commission (June 2004), Finding 7.2
[21] Productivity Commission (June 2004), Recommendation 7.1
[22] Productivity Commission (June 2004), Finding 7.5
[23] Productivity Commission (June 2004), Recommendation 7.9 cf *Application of Epic Energy South Australia Pty Ltd* [63, 94] and National Gas Code Section 8.6
[24] Productivity Commission (June 2004), Finding 9.7 cf. ICRC (July 2004), p.xxii
[25] Consistent with the ICRC's foreshadowed approach in the Draft Decision, ICRC (July 2004), p.24
[26] Productivity Commission *Review of the National Access Regime – Draft Report*, March 2001, p.100
[27] Productivity Commission (March 2001), p.71

Reflecting more broadly on its recent reviews of industry and generic access regimes, the Productivity Commission called for a rebalancing of access pricing regulation, stating:

> The Commission's recent inquiries have revealed a need to re-balance the emphasis away from achieving immediate gains for users and consumers from existing infrastructure…to a regulatory framework that will also facilitate efficient investment in augmented and new facilities. In this way, pro-competition regulation is more likely to ensure that Australia has modern infrastructure which is provided and used efficiently, with long-term benefits to the Australian community.[28]

Judicial rulings on application of Gas Code

The Productivity Commission's findings on the negative impacts of deficient or poorly applied access regimes are reinforced by judicial determinations on the pricing provisions of the Gas Code. As an example, the WA Supreme Court - addressing the argument that regulatory authorities could ignore the consequences of past investment decisions in pricing decisions - commented on:

> …a growing awareness that such an outcome, although offering the advantage of lower prices for consumers in the short term, could be contrary to the public interest in the long term, because of the adverse effects on necessary future investment in such assets of any adverse outcomes of past investments.[29]

Views of government stakeholders on regulatory returns and underinvestment

Key government stakeholders have also emphasised the importance of regulatory approaches to cost of capital estimation being informed by the need for continued long-term investment in energy distribution networks.

Recently the NSW Treasury, in responding to an IPART Draft Decision on electricity distribution networks which proposed a 6.8 per cent real pre tax WACC, commented:

> However, Treasury considers that IPART's proposed 6.8% real pre-tax WACC does not reflect the commercial return required by investors to invest in energy network infrastructure.[30]

The ICRC has stated that it has calculated a preferred WACC of 6.8 per cent for ActewAGL's gas distribution network. The NSW Treasury noted in its response to IPART's Draft Decision that a cost of capital at this level was not a 'conservative' estimate, and highlighted the potential for deterrence of new investment which would flow from a cost of capital estimate which was below the actual cost faced by the service provider seeking to finance ongoing investment.[31]

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[28] Productivity Commission *Annual Report 2000-01*, February 2002, p.16
[29] *Re: Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231, [151]
[30] NSW Treasury *Weighted Average Cost of Capital - Response to IPART Draft Determination – NSW Electricity Distribution Pricing 2004/05-2008/09*, March 2004, p.3
[31] NSW Treasury (March 2004), p.6

Integrating the findings of the Review of the Gas Access Regime

As the Productivity Commission's *Review of the Gas Access Regime* has been finalised and released, the ICRC has the advantage of being able to consider its response to ActewAGL's proposed Access Arrangement revisions in the light of the most comprehensive independent review of the operation of the National Gas Code to date.

Many of the key findings of the recently released Final Report are directly relevant to the issues under consideration by the ICRC. The ENA considers that the ICRC has the opportunity of integrating some of the key findings of the review into its pending Final Decision. The ENA considers that there are three key areas in which the ICRC can effectively achieve this integration:

- first, by acknowledging the potential asymmetrical risks and costs of underinvestment and 'erring' on the side of ensuring adequate signals for investment by adopting a WACC value either in the mid-point or upper bound of ActewAGL's proposed range
- second, by acknowledging the existence of asymmetric regulatory risk and ensuring the Final Decision adequately compensates for this risk – especially noting the ICRC's proposed restrictive approach to pass through provisions
- third, by ensuring regulated access prices reflect the medium term interests of the community in continued investment in network growth and adequate reinvestment in existing gas distribution networks

The ENA would welcome ongoing discussion with the ICRC on these proposed methods of ensuring the ICRC's Final Decision effectively builds on experience under the gas access regime to date.

The Energy Networks Association
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