



**Submission to the Essential Services Commission of
South Australia**

**Review of Envestra's Gas Distribution
Access Arrangement
Response to Issues Paper**

11 March 2005

National Office

Level 3, 40 Blackall Street, Barton ACT 2600
Telephone: +61 2 6272 1555 Facsimile: +61 2 6272 1566
Email: info@ena.asn.au Website: www.ena.asn.au

1. Overview

The Energy Networks Association (ENA) welcomes the opportunity to comment on the *2006 Review of Envestra's Gas Distribution Access Arrangement – Issues Paper* (*Issues Paper*) released by the Essential Services Commission of South Australia (the Commission) in November 2004.

The ENA considers that the *Issues Paper* is a useful mechanism to assist the Commission in its assessment of proposed revisions to the existing Access Arrangement for the South Australian gas distribution system. A number of areas of the *Issues Paper*, however, cause energy network businesses significant concern.

The Commission puts forward a contention that the requirements of the National Gas Code to provide a description of reference services may provide a basis for more detailed service quality and reliability requirements to be imposed on the service provider. The ENA believes that this contention is contrary to the ordinary meaning of the relevant Code provisions, and disregards the significant role of the terms and conditions component of an Access Arrangement.

The ENA is supportive of the Commission's commitment to examine the implications of recent merit and judicial review outcomes under the gas access regime, as well as the recent independent review of the regime undertaken by the Productivity Commission. In ENA's view these considerations should reinforce the need for the Commission to adopt regulatory approaches which protect the medium term interests of the community in adequate investment in gas distribution networks, based on the recognition that regulation should seek outcomes consistent with workable competition, not theoretical ideals of perfect competition.

Recent Australian Competition Tribunal rulings also provide key practical guidance to Australian regulatory bodies seeking to apply the National Gas Code. Guidance on such issues as appropriate approaches to selecting values from feasible ranges, and the particular role of the regulator under the Code's 'propose-respond' model, have the potential to make regulatory decision-making more transparent and consistent with the original objectives of establishing a light-handed incentive-based regulatory regime.

Whilst welcoming the discussion of these matters in the *Issues Paper*, the ENA is concerned with a number of aspects of the Commission's treatment of these past precedents. In its discussion on cost of capital issues, for example, the Commission appears to consider it has a wider regulatory role than provided for under the 'propose-respond' model established in the Gas Code. Similarly, the *Issues Paper* also appears to suggest that the Commission's Code obligations can be fulfilled merely by selecting individual decision parameters in the mid-points of regulator-derived feasible ranges, without reference to the asymmetric costs to the community of underinvestment or the possible varying distribution profiles of estimation errors.

Under the Code, the Commission has the responsibility of making decisions about the treatment of capital expenditure incurred in the first regulatory period. This provides the Commission with an opportunity to apply a strengthened incentive-based regime, which relies on established efficiency mechanisms to reveal efficient costs. The ENA contends that given the substantial incentives for efficiency contained in existing

mechanisms (i.e. the price cap approach combined with a defined efficiency carryover mechanism), a detailed, intrusive and subjective *ex post* review of the prudence of past actual capital investment is unnecessary. Recent decisions by other Australian regulatory bodies provide support for this enhanced approach.

2. Background

This submission responds to the *2006 Review of Envestra's Gas Distribution Access Arrangement – Issues Paper* released by the Essential Services Commission of South Australia in November 2004.

The Energy Networks Association is the national representative body for gas and electricity distribution network businesses. The members of the ENA include:

- ActewAGL
- AGL Energy Networks
- AlintaGas Networks
- Aurora Energy
- Citipower
- Country Energy
- ENERGEX
- EnergyAustralia
- Envestra
- Ergon Energy
- ETSA Utilities
- Integral Energy
- Multinet Gas
- NT Power and Water Corporation
- Powercor
- SPI Networks
- United Energy Distribution
- Western Power

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 \$34 billion, and each year energy network businesses undertake investment of around than \$5 billion in network operation, reinforcement, expansions and greenfields extensions.

3. Standards of reference services and the National Gas Code

The current National Gas Code does not include specific provisions on the standards of service of reference services. Under Section 3.2 (a) a service provider is required to include a description of the services likely to be sought by a significant part of the market.¹

The *Issues Paper* raises a question of whether this obligation could be subject to the interpretation that a 'description' must include the detailed expectations of the service

¹ National Gas Code, Section 3.2

provider of the quality and reliability of the service. The ENA considers this interpretation flawed as:

- it strains the ordinary meaning of the relevant Code provision to interpret it as the basis for detailed service quality regulation
- it fails to account for the role of terms and conditions component of a service providers' Access Arrangement
- Envestra's service, quality and reliability obligations are already set out in detail in the relevant distribution licence, the Retail Market Rules and the ESCOSA Gas Distribution System Code

The Commission should not seek to play a duplicative role in setting and enforcing service standards based on an unsustainable interpretation of Section 3.2 (a). An appropriate approach in this area would be for Envestra's Access Arrangement revisions to specify the forecast costs associated with existing service standard obligations, and for ESCOSA to accept any reasonable forecasts made taking into account any new and additional costs associated with changes to service standards.

This approach would be consistent with the existing National Gas Code, the Productivity Commission's proposed pricing principles for the gas access regime, and Section 16 (2) (a) of the proposed National Electricity Law, which explicitly provides that an economic regulator should provide for the recovery of efficient costs of complying with regulatory obligations.²

4. Interpretation of Section 8 of the National Gas Code

Possible changes to Section 8.1

The ENA considers that the Productivity Commission's recommended changes to Section 8.1 (a) are consistent with the Commonwealth Government's proposed changes to Part IIIA of the *Trade Practices Act*, which provides the framework for the existing national third party access regime.

This consistency has been deliberately sought by the Productivity Commission and Federal Government, recognising the role of Part IIIA to provide an overarching framework to industry-specific regimes such as the National Gas Code.³

The ENA considers an even more critical issue is the clear guidance these proposed pricing principles provide for regulatory decision-making into the future. As an example, both the proposed Part IIIA and gas access regime pricing principles provide specific direction that both commercial *and* regulatory risks should be considered in decisions on returns on capital.⁴

² See Productivity Commission *Review of the Gas Access Regime – Inquiry Report*, 11 June 2004, p.xlix

³ See Productivity Commission (2004), p. vi

⁴ Productivity Commission (2004) p.xlix and *Government Response to the Productivity Commission Review of the National Access Regime*, February 2004, p.5

Interpretation of ‘workable competition’

The ENA welcomes the proposal of the Commission to give close consideration to the implications and outcomes of the Epic Energy case, and specifically, implications of the concept of workable competition for applying Section 8.1(b) of the Code.

The features of workable competition which are of most relevance to the gas distribution industry in South Australia are that it:

- is dynamic process, not a description of static productive efficiency⁵
- can be consistent with prices being at times above efficient level, where this is justified by past risks and investment⁶
- provides crucial guidance that the ‘efficient costs’ are not capable of certain calculation, and can at best be approximated⁷
- provides no justification for an approach which seeks to fix a ceiling on the revenue stream that might be earned by a service provider, even when read in concert with Section 8.1 (a)⁸

The ENA believes that consideration of these features should be a critical part of the Commission’s task in assessing proposed revisions to Envestra’s Access Arrangement.

5. Role of the regulator under the National Gas Code

The role of the regulator under the gas access regime is defined by the ‘propose-respond’ model contained in the provisions of the regime. The regime is based on a service provider proposing a set of terms and conditions for access (including price) with the regulatory authority having the role of determining the consistency of the service provider’s proposed Access Arrangement with the terms of the National Gas Code.⁹

The Commission’s *Issues Paper* correctly concludes that the Commission must carefully consider any tensions or conflicts between the various Section 8.1 objectives and the range of feasible outcomes or arrangements between alternative pricing methodologies which might be consistent with Code principles. However, the *Issues Paper* goes on to state:

What is by no means as sure is the extent to which the Commission is – or should be – constrained from deciding not to approve a proposed Access Arrangement Revision with respect to a Reference Tariff or Reference Tariff Policy element because the Commission believes a different access arrangement would better achieve its understanding of the statutory objectives of the law.¹⁰

⁵ *Re: Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231 [126]

⁶ *Re: Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231 [144]

⁷ *Re: Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231 [143]

⁸ *Re: Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231 [142]

⁹ See for example National Gas Code Section 2.46

¹⁰ ESCOSA 2006 *Review of Envestra’s Gas Distribution Access Arrangement – Issues Paper*, November 2004, p.21

It is unclear on what basis the Commission makes this statement, given that specific guidance on this matter is provided by the *GasNet* judgement, which states:

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.¹¹

The Competition Tribunal has further clarified that the scope of a regulatory authority to require amendments to the service provider's Access Arrangement, or impose its own, does not arise until it has satisfied itself that it is non-compliant with the existing Code (taking into account s.2.24).¹²

In ENA's view these statements make clear that:

- a regulatory authority has a duty to assess whether there are any tensions or conflicts between the service providers' Reference Tariff Principles
- an assumption that the principles of Section 8.1 will necessarily conflict is unfounded and an unreasonable starting point for a regulator, especially given that the Productivity Commission's recent inquiries have identified that there is a need to give greater priority to the medium-term interests of existing and potential users of infrastructure in adequate investment in infrastructure availability and support
- a decision by a regulator on whether the principles of Section 8.1 of the Code conflict should be reasonable, clearly articulated and supported with evidence
- if a regulator considers that a service provider has lodged revisions to an Access Arrangement which fall outside the range of choices reasonably open to them, it is obliged to provide detailed evidence to support its position.

6. Choosing values in a plausible range

The ENA has serious concerns over the approach adopted in the *Issues Paper* to selecting appropriate values in plausible ranges.

These concerns arise due to inadequate consideration of the implications of the recent *GasNet*, *Moomba-Adelaide Pipeline System* and *EAPL* rulings of the Australian Competition Tribunal.

The relevant key findings of these rulings are that:

- there are no single 'correct' figures involved in determining the value of parameters used in determining tariff levels - different parties can come to

¹¹ *Application of GasNet Australia (Operations) Pty Ltd* [2003] ACompT [29]

¹² *Application of GasNet Australia (Operations) Pty Ltd* [2003] ACompT [30]

different conclusions which are nonetheless consistent with the provisions of the Code¹³

- regulatory authorities must provide a clear rationale for seeking to impose either the lowest or low single point estimates where there exist a credible range of potential values¹⁴
- neither the pricing objectives of replicating the outcomes of competitive markets or allowing the recovery of ‘efficient’ costs under the National Gas Code (see Section 8.1 (a) and (b)) require a regulatory authority to select the lowest cost estimate in a credible range of potential values¹⁵
- selecting the lowest or a low single point value from a credible range of potential values for a cost estimate subjects the service provider to asymmetric risk and a prudent service provider would not base future investment planning on accessing the lowest cost product in the lowest cost market¹⁶
- a reasonable estimate for a value where a credible range of values exists may be arrived at by at least one of three methodologies - the use of an arithmetic mean, a modified arithmetic mean (with highest and lowest figures excluded) or a median value¹⁷

In ENA’s view the Commission should be seeking to avoid imposing asymmetrical risk on service providers of the kind cited by the Commission in the excerpt from the *Moomba-Adelaide Pipeline System* ruling. However, the implication of the interpretation proffered by the *Issues Paper* – that the Commission should in each circumstance seek to select mid-points of feasible ranges - is unjustified. Applying this approach in practice would lead to circumstances where a service provider faced up to a 50 per cent risk of failing to recover its legitimate costs of business, including its cost of capital (assuming a normal distribution of regulatory or estimation errors).

This outcome would not appear to be consistent with a conservative approach to economic regulation which places appropriate weight on the medium-term interests of the community in adequate investment in new and existing gas distribution networks. The ENA considers that the Commission should give weight to the asymmetrical impacts of over and under-investment in selecting values from plausible ranges. This is particularly the case given the Productivity Commission has noted that inappropriate regulatory focus may have been given in the past to constraining short-term price movements, and inadequate weight placed on ensuring sufficient medium-term investment.¹⁸

It is the ENA’s view that an additional issue which the Commission is obliged to consider is the reasonableness of the underlying assumptions contained in Envestra’s Access Arrangement regarding the likely distribution of parameter and WACC estimates. Recently, as part of AGL Gas Networks’ revised gas Access Arrangement, the NSW regulator IPART was presented with a study by Professor Stephen Gray which applied statistical techniques against a range of parameter values to determine a

¹³ *Application of GasNet Australia (Operations) Pty Ltd* [2003] ACompT [29]

¹⁴ *Application of Epic Energy South Australia Pty Ltd* [2003] ACompT5 [27, 32, 84]

¹⁵ *Application of Epic Energy South Australia Pty Ltd* [2003] ACompT5 [92]

¹⁶ *Application of Epic Energy South Australia Pty Ltd* [2003] ACompT5 [63, 94]

¹⁷ *Application of Epic Energy South Australia Pty Ltd* [2003] ACompT5 [64]

¹⁸ Productivity Commission *Annual Report 2000-01*, February 2002, p.16

reasonable estimate of the equity beta.¹⁹ An implication of this report is that explicit assumptions need to be made in WACC estimations about the types of statistical distributions of errors present in various WACC parameter estimates (which will have implications for the distribution of a feasible WACC range). The distribution assumptions adopted by AGL Gas Networks in estimating its WACC are set out in Table 1.

Table 1- Possible cost of capital distribution assumptions²⁰

Cost of capital input	Distribution of errors
Risk free rate	Robust market-based estimation possible – errors likely to be normally distributed
Market risk premium	Normal distribution
Equity beta	Uniform distribution
Debt margin	Uniform distribution

The table above illustrates that the simple assumption in the Commission’s *Issues Paper* that mid-point estimates are consistent with managing parameter uncertainty is potentially problematic, as it assumes a normal distribution of estimation errors for all parameters (including, by implication the final WACC estimate). In fact, the distribution pattern may be more complex, and may require a prudent service provider adopting explicit assumptions about distribution of estimation errors that are inconsistent with the *Issues Paper*, but which otherwise meet the relevant requirements of Sections 8.1-2, Sections 8.30-8.31, and Section 2.24.

From these considerations the ENA contends that several guiding principles can be drawn:

- first, that the regulator’s initial task is to assess whether the values put forward by the service provider in a revised Access Arrangement fall within a plausible or feasible range
- second, that where any value is found not to be within a plausible range, the regulator should estimate a plausible range and select a value in the upper bounds of parameter range, to ensure the service provider has a greater than 50 per cent chance of recovering the efficient costs of providing the reference services
- third, that any selection of values in the mid-point or lower bound of a plausible range must be reasonably based taking into account all the circumstances and Section 2.24 of the Gas Code.

7. Applying incentive regulation to new facilities investment

The Commission’s *Issues Paper* seeks stakeholder views on the approach it should adopt to capital expenditure in the first regulatory period.

¹⁹ Strategic Financing Group Consulting *The equity beta of an energy distribution business – final report prepared for AGL*, 10 February 2005 <www.ipart.nsw.gov.au>

²⁰ Adapted from Table 2.1 in *AGL Access Arrangement for NSW Network – Response to Draft Decision*, February 2005, p.4 <www.ipart.nsw.gov.au>

Under an *ex ante* incentive-based regulatory approach which features incentives for ongoing efficiencies it is widely recognised that it is possible for economic regulators to take a less intrusive approach to assessing the treatment of past capital expenditure. This recognition has arisen because of the direct financial incentives on service providers under price cap regulation to ensure capital and operating costs are efficient. In ENA’s view the Commission has a significant opportunity in its assessment of Envestra’s proposed Access Arrangement revisions to support some recent movements by other Australian regulatory bodies which are consistent with the implementation of more ‘light-handed’ incentive-based approaches.

Table 2 illustrates recent decisions of Australian economic regulators on the treatment of capital expenditure in previous regulatory periods under the gas access regime.

Table 2 – Regulatory approaches to treatment of past capital expenditure

Regulatory authority	Sector	Approach
Economic Regulation Authority of Western Australia (February 2005)	Gas distribution	Draft decision that the ERA is satisfied that all new investment was prudent and met the requirements of the Code
NSW Independent Pricing and Regulatory Tribunal (December 2004)	Gas distribution	Regulatory asset base adjusted to fully reflect actual capital expenditure and forecast 2004-05 expenditure
Independent Competition and Regulatory Commission – ACT (October 2004)	Gas distribution	All past capital expenditure accepted as prudent
Victorian Essential Services Commission (October 2002)	Electricity and gas distribution	Past capital expenditure added to regulatory asset base recognising the incentive properties of the regime

The ENA considers that the Commission should adopt the approach of automatically rolling forward past capital expenditure into the regulatory asset base for the second Access Arrangement period for the following reasons:

- the addition of past actual capital expenditure to the asset base recognises the significant incentives operating under the existing efficiency carryover mechanism
- this approach is consistent with the regulatory practice of a significant number of Australian economic regulators applying the gas access regime
- *ex post* analysis of the efficiency of past capital investment programs is likely to be costly, and involve significant subjectivity in any retrospective assessments of prudent business decisions
- *ex post* assessment of capital expenditure decisions would create significant additional and asymmetric regulatory risk

Due to the above factors, in ENA’s view there is a substantial case for deeming the past capital expenditure of Envestra to meet the requirements of Section 8.16.

8. Cost of capital methodology issues

Choice of real pre-tax or nominal post-tax approach

The *Issues Paper* seeks comment on the issue of whether the Commission should provide guidance to Envestra on applying either a real pre-tax or a nominal post tax approach to cost of capital calculations.

The ENA considers that, consistent with the outcomes of the *GasNet* ruling, it is open to a service provider to apply a conventional form of the capital asset pricing model in determining an appropriate cost of capital estimate.²¹ Both the real pre-tax and nominal post-tax forms of the CAPM can be considered to be used in conventional commercial and regulatory practice in Australia. The ENA believes that Section 8.5 and 8.5A of the Gas Code provide the service provider with discretion to calculate proposed total revenue on a real or nominal basis, using a post-tax or pre-tax approach. As such it is inconsistent with the intended operation of the Gas Code for the Commission to *require* either approach, as it may result in the regulator having effectively pre-determined an element of the Access Arrangement assessment process.

Plausible cost of capital ranges and methodologies

It is clearly the responsibility of the service provider under the existing ‘propose-respond’ model to include in their Access Arrangement a proposed Reference Tariff policy based in part on a rate of return determined consistent with Section 8.30-8.31 of the National Gas Code.

The ENA is not aware of any Australian regulatory authority applying the gas access regime to date which has not adopted a position that it is the service provider in the first instance that should propose a weighted average cost of capital.

Recently, the *Moomba-Adelaide Pipeline System*, *EAPL* and *GasNet* rulings of the Australian Competition Tribunal have provided significant guidance to regulatory authorities on the scope of the regulators role under the National Gas Code and appropriately selecting point estimates from within reasonable ranges. Many of these guiding principles have been set out in the previous sections of this submission.

In ENA’s view it is the Commission’s function to carry out an assessment of whether the WACC or other key parameter values provided by Envestra in its lodged revisions to its existing Access Arrangement fall within plausible ranges considering academic and market evidence, together with previous regulatory practice. While the Commission providing initial views of cost of capital issues may serve a useful role in focusing attention on key matters, the Commission should ensure that any decisions on proposed revisions are clearly based on an independent and substantive assessment of the consistency of proposed revisions against the relevant Code provisions, not the consistency of the service provider’s revisions with any pre-announced Commission views.

The Energy Networks Association
11 March 2005

²¹ *Application of GasNet Australia (Operations) Pty Ltd* [2003] ACompT [45]