



**Submission to the Queensland Competition Authority**

## **Regulation of Electricity Distribution**

**Response to Draft Determination**

**25 February 2005**

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## Executive summary

The Energy Networks Association (ENA) welcomes the opportunity to comment on the *Draft Determination – Regulation of Electricity Distribution* (Draft Determination) released by the Queensland Competition Authority (QCA).

The Draft Determination occurs at time of particularly strong community and public policy focus on infrastructure reliability and investment issues. The ENA considers that the QCA's final determination should be informed by key findings of the *Report on Electricity Distribution and Service Delivery for the 21<sup>st</sup> Century* (Somerville Report), the recently completed Productivity Commission review of both the national and gas access regimes, and recent outcomes of similar price review processes in other Australian jurisdictions. A consistent theme of these reviews has been the need for cautious and balanced regulatory outcomes on access pricing issues which protect the medium-term interests of the community by ensuring the avoidance of costly underinvestment in essential infrastructure.

The ENA considers some of the elements of the Draft Determination will not achieve the QCA's stated objective of improving investment certainty and facilitating ongoing improvements in network performance.

The capital expenditure mechanisms proposed by the QCA appear to be complex and require further clarification from the QCA. The ENA is particularly concerned, given the outcomes and findings of the Somerville Report, at the 20 per cent reduction to ENERGEX's proposed capital expenditure program which does not appear to be based on any contention that the proposed expenditure is imprudent or unnecessary. A sound capital expenditure framework would feature allowed revenue which *fully* reflected the best estimates of prudent expenditure, non-discriminatory and transparent pass through and 'trigger' mechanisms, and a full analysis of any potential negative interactions between multiple capital expenditure mechanisms.

A second aspect of the Draft Determination which fails to adequately recognise the need to improve investment incentives and certainty is the QCA's adoption of an equity beta estimate of 0.9. This estimate is one of the lowest proposed for deriving a cost of capital for any Australian energy network business, despite the QCA's acknowledgement that its aggressively low beta estimate for the current revenue control period has represented a regulatory error in the light of subsequent evidence. The QCA's estimate of 0.9 also fails to apply an appropriate degree of conservatism and caution in its reliance on recent market data, given the recognised statistical imprecision involved in market data derived beta estimates.

A final but significant area of concern with the Draft Determination is its treatment of efficiency gains. Energy network businesses hold serious concerns regarding the negative impacts of this potential regulatory precedent on incentives for future efficiency gains. The QCA is proposing to retrospectively remove the benefits of any achieved efficiency gains made during the current regulatory period on a subjective basis which has no support in past Australian regulatory practice. The proposed approach is unsupported by analysis regarding the actual level of efficiency gains achieved, and inconsistent with any model of incentive based regulation.

The subjective nature of the decisions in the Draft Determination such as, the resource constraint on capital expenditure allowance, the treatment of efficiency gains, and the claw back on depreciation because of changed industry opinion on standard asset lives, merely reinforces the need for the introduction of a merits review for regulatory decisions impacting on distribution networks

## **Background**

This submission responds to the *Draft Determination – Regulation of Electricity Distribution* released by the Queensland Competition Authority in December 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 \$33 billion, and each year energy network businesses undertake investment of more than \$5 billion in network operation, reinforcement, expansions and greenfields extensions.

## **Context for QCA Draft Determination**

The Draft Determination by the QCA should fully consider the impacts on energy network regulation of wider economic and public policy contexts.

Three important elements of this context include:

- the Independent Panel *Report on Electricity Distribution and Service Delivery for the 21<sup>st</sup> Century* (Somerville Report)
- recent public inquiries by the Productivity Commission into operation of the national and gas access regimes

- an increasing focus in recent price reviews in other jurisdictions (e.g. NSW and South Australia) on ensuring future network tariffs take into account refurbishment and expansion needs arising from ageing network infrastructure and expanding electricity demand

### ***Somerville Report***

In July 2004 the Somerville Report was forwarded to the Queensland government. This report identified many of the issues involved in maintaining and expanding an ageing network infrastructure to cope with the growing patterns of demand for electricity.

The Somerville Report, correctly, informs many areas of the QCA Draft Determination, and its findings are reflected in the proposed capital and operating programs put forward by Ergon Energy and ENERGEX.

The ENA considers that the operational circumstances facing Ergon Energy and ENERGEX detailed in the report also warrant the QCA adopting an overall approach to the price review which relies on the business expertise of each network operator in identifying network refurbishment requirements and quantifying required capital, operating and maintenance programs to meet these requirements.

In ENA's view the performance of the revenue cap regime over the 2001-05 period, and some of the initial demand and cost of capital benchmarks adopted by the QCA, would suggest that over the next period the QCA should adopt a 'precautionary principle' that would err in favour of the need to maintain a sustainable investment environment for electricity distribution in Queensland. This submission outlines some specific actions and approaches the QCA could adopt in this regard.

### ***Productivity Commission inquiries into gas and national access regimes***

The Productivity Commission *Review of the National Access Regime*, completed in September 2001, provided the first comprehensive examination of Australia's third party access framework contained in Part IIIA of the *Trade Practices Act*. This review re-examined Part IIIA and its operation since the original Hilmer reforms of a decade ago. It found that Part IIIA was deficient in some respects, but that retention of an overarching framework for third party access was justified.

The flaws the Commission found in the structure and operation of Part IIIA were a lack of guidance on the objectives of the national regime and what pricing principles should be used by regulatory authorities in decision-making. The Commission also found that regulatory risk under the regime was higher than it needed to be, and that existing regulatory approaches created a substantive risk of underinvestment in the medium term which would lower overall community welfare.

In February 2004 the Commonwealth Government released a national response to the final report of the *Review of the National Access Regime*. This response endorsed the broad thrust of the Commission's report, and largely adopted the recommendations proposed by the Commission.

After the review of the national access framework, the Commonwealth Government initiated a review of the industry-specific gas access regime embodied in the National Gas Code. In August 2004 the Productivity Commission's final report on the *Review of the Gas Access Regime* was released. The report found significant shortcomings in the gas access regime, including:

- a lack of effective guidance for establishing regulated access prices
- the potential for distorted investment outcomes, including underinvestment
- an inadequate recognition in the framework of the risk of regulatory error

Importantly, given the similarities between regulatory approaches and frameworks between the electricity and gas network sector similar shortcomings are likely to be present in the electricity regulatory framework as were identified in gas.

## **Approach to capital expenditure in next regulatory period**

The QCA Draft Determination incorporates significant reductions to proposed capital expenditure programs, particularly those proposed by ENERGEX. In addition to these reductions the QCA has proposed a series of regulatory mechanisms and approaches to future capital expenditure approaches which it claims are designed to increase regulatory and investment certainty.

### ***Proposed mechanisms***

The mechanisms and approaches include that approval of only 80 per cent of ENERGEX's proposed capital expenditure is to be allowed for in forward revenue, and the following four mechanisms:

- ***Mechanism 1 - ENERGEX pass through of BRW benchmark*** - an *ad hoc* opportunity for pass through of capital expenditure in excess of this 80 per cent limit
- ***Mechanism 2 - ENERGEX pass through up to own benchmark*** - a 'stricter' *ad hoc* pass through arrangement for pass through of expenditure up to ENERGEX's proposed capital expenditure benchmark of \$3376.0m
- ***Mechanism 3 – Ergon Energy possible major projects pass through*** – a pass through for possible though uncertain major capital projects (with a less than 80 per cent change of proceeding) with a cost of at least \$5 million
- ***Mechanism 4 – Unanticipated major projects pass through*** – a pass through arrangement for extremely large (greater than \$30 million) capital projects which were unanticipated at the time of the price review

### ***Concerns with capital expenditure mechanisms and approach***

The challenging circumstances facing the Queensland electricity distribution network in the next five years may provide some justification for proposal by the QCA of new approaches to forecast capital expenditure in the next regulatory period. The ENA

considers, however, that the mechanisms must be accepted as workable and potentially effective in reducing investment risk by Ergon Energy and ENERGEX if they are to be implemented.

The capital expenditure approaches adopted by QCA also have significance in the context of wider regulatory practices to capital investments. The ENA has several concerns about the QCA's approach and their potential impact on the evolution of incentive-based approaches to assessment of capital expenditure under utility regulation. These concerns include:

- a lack of a rigorous basis for excluding from allowable revenues up to 20 per cent of capital expenditure which is forecast to be necessary to maintain and enhance service quality and reliability for ENERGEX
- the potential complexity of the four separate capital expenditure mechanisms with different materiality and information thresholds and requirements
- the potential for the creation of unanticipated perverse incentives arising from the interaction of multiple mechanisms and pass through arrangements

To clarify some of the complexities of the pass through mechanisms the future shape of capital expenditure mechanisms should be determined in consultation between the QCA and the relevant service providers. In making a final determination on future arrangements, however, ENA considers that the QCA should give consideration to:

- ensuring ENERGEX's initial allowed revenue *fully* reflects the best estimates of future capital expenditure requirements and is not constrained because of the regulators assessment of ability to spend
- ensuring where possible that pass through and trigger arrangements are developed in consultation with the two service providers
- analysing and addressing any potential negative incentives created by the interaction of multiple capital expenditure mechanisms.

## **Equity beta assumption**

The QCA has adopted an equity beta assumption of 0.9 for ENERGEX and Ergon Energy. The ENA considers this estimate fails to accurately reflect the actual level of risk faced by the relevant service providers. A more balanced appraisal of the methodological uncertainties involved in beta estimation should inform the QCA's final decision.

### ***Previous Australian regulatory practice***

The QCA's decision to adopt an equity beta assumption of 0.9 is inconsistent with the majority of past regulatory determinations.

Table 1 details the equity beta assumptions adopted in recent Australian regulatory decisions in relation to energy infrastructure regulation.

**Table 1- Equity beta assumptions – Australian regulatory decisions**

Regulatory authority	Sector	Network operator or asset description	Proxy equity beta assumption (mid point where range given)
ACCC	Electricity transmission (2002)	Electranet	1.0
	Electricity transmission (2002)	SPI Powernet	1.0
	Electricity transmission (2001)	Powerlink	1.0
	Gas transmission (2003)	Moomba-Adelaide Pipeline	1.16
	Gas transmission (2002)	Principal Victorian gas network	0.98
	Gas transmission (1998)	Principal Victorian gas network	1.20
ERA (formerly OffGAR)	Electricity distribution (2005)	Principal Western Power network	1.0*
	Gas distribution (2000)	AlintaGas WA gas networks	1.08
ESC	Gas distribution (2002)	Victorian gas networks	1.0
	Gas distribution (1998)	Victorian gas networks	1.2
	Electricity distribution (2000)	Victorian electricity networks	1.0
ESCOSA	Electricity distribution (2004)	ETSA Utilities	0.8 (draft)
ICRC	Electricity distribution (2004)	ACT electricity network	0.9
	Gas distribution (2004)	ACT and surrounds network	0.9-1.09 11 (midpoint 1.0)
IPART	Electricity distribution (2004)	NSW urban and regional networks	0.78-1.11 (0.95)
	Electricity distribution (1999)	NSW urban and regional networks	0.78-1.14 (0.96)
	Gas distribution (2004)	AGL Gas Networks	0.78-1.11 (0.95) (Draft)
	Gas distribution (1999)	AGL Gas Networks	0.9-1.1 (1.0)
	Gas distribution (1999)	NSW regional network	0.96-1.10 (1.03)
QCA	<i>Electricity distribution (2004)</i>	<i>Qld urban and regional networks</i>	<i>0.9 (Draft)</i>
	Electricity distribution (2001)	Qld urban and regional networks	0.71
	Gas distribution (2001)	Queensland gas networks	0.97

\* - proposed by Allens Consulting Group

From the evidence contained in Table 1 it is possible to make several observations on past regulatory practice equity beta assumptions. For example:

- *the QCA has consistently adopted more aggressive equity beta assumptions in its decisions on electricity distribution networks than other regulatory authorities* – in spite of government ownership of these networks ruling out the possibility of directly applicable market-based evidence on the beta value
- *regulatory practice over the past seven years has converged on an equity beta value of 1.0* – with the simple average of past regulatory decisions excluding those of the QCA detailed in Table 1 being greater than 1.0
- *the QCA is proposing the adoption of the equal second lowest point estimate on which a final cost of capital determination ever been based in Australia* – with its own previous decision on electricity being the only lower point estimate utilised

The QCA Draft Determination states that most Australian regulators have adopted a proxy equity beta of between 0.7 and 1.2, with many adopting a value close to 1.0. In

fact, aside from the QCA, to date all Australian regulatory authorities to date have set regulated charges by using equity betas estimates in a range from 0.9-1.2.<sup>1</sup>

The ENA considers that in the light of the significant and identified difficulties with placing reliance on current market derived equity beta estimates (including high standard errors and the systemic bias which the recent post technology boom has created for beta estimates) significant weight should be placed on consistency with past decisions of other Australian regulators.

### ***Deriving equity betas from market evidence***

The estimation of the equity beta of individual firms from market evidence is a complex and contentious area of discussion in financial economics.

It is well recognised that the estimation of equity betas for listed and non-listed firms is a complex analytical exercise with statistically imprecise outputs. Beta estimations also involve significant amounts of discretion which further impact on the replicability of the output.

The statistical accuracy of equity beta estimation is also likely to be adversely impacted by:

- ***a lack of close comparators for non-listed entities*** – while there are some listed entities from which proxy equity betas can be derived, arguably none of these share the particular risk characteristics of the firms in question
- ***use of stock returns as a proxy for market returns*** – finance theory would suggest that distortions are likely to be introduced into beta estimates by this process as stock returns represent only a subset of actual markets available to investors (for example, residential and commercial property, collectibles and precious metals)
- ***variability of measured equity betas through time*** – which may impact on historical measurements, and which has also given rise to the well known ‘Blume adjustment’ which reflects the observed convergence of most firms equity beta towards 1.0 over time
- ***influence of significant market movements and corrections*** - with significant evidence that one-off market ‘bubbles’ (such as the ‘technology boom’) and subsequent corrections can severely distort equity beta measurements
- ***uncertainty over basing forward looking estimates on past measurement*** – the capital asset pricing model is a forward looking model, and there is uncertainty over the explanatory power of historical beta estimates in terms of forward beta estimates
- ***variability of measured beta estimates based on the time period chosen*** – with equity betas varying substantially according to the sampling period selected

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<sup>1</sup> This assumes that where a range was used that the mid-point estimate of the beta range was used. This is a conservative assumption given that several IPART decisions have effectively adopted cost of capital estimates above the mathematical mid-point of the calculate possible range (which in turn would imply the effective equity beta input into these cost of calculations were from the upper range of that indicated in Table 1).

- ***variability of measured beta estimates based daily, weekly or monthly data***– the use of these different inputs at times produces large variations in beta estimates
- ***influence of non-regulated activities with different risk profile*** – accurate equity beta estimates should take into account the different risk characteristics of other related competitive activities of regulated entities, however, no sound methodology for achieving this has yet been developed
- ***changes to levels of systemic risk from changes in the form of regulation*** – with the movement to price cap regulation imposing significant new systematic risk compared to the previous revenue cap regulation

These methodological issues place a considerable constraint on the extent to which measured equity betas can be used as a primary input into network pricing determinations which have significant consequences for investment in long-lived network assets. While some of the factors outlined above appear to have been taken into consideration by the QCA, other significant methodological issues appear to have been overlooked in the Draft Determination and its summary of an external Allens Consulting report on asset and equity betas.

#### ***Response of other regulatory bodies to beta measurement issues***

Other Australian regulatory bodies have responded to the numerous methodological difficulties outlined above by placing a lesser emphasis on measured betas, and proportionally greater weight on past regulatory practice, the risk of regulatory error, and the desirability for of avoiding step-changes in cost of capital estimates.

The ESC in its recent 2002 review of Victorian gas Access Arrangements opted to approve cost of capital estimates that were based on proxy equity betas of 1.0. In doing so the ESC extensively surveyed recent market evidence, but considered that it was not able to place significant weight on this evidence, given the substantial uncertainty associated with statistical derivations of beta from limited data available. Instead, the ESC noted that it preferred to adopt a ‘conservative’ approach of placing considerable weight on the potential long term consequences of the decision and the practice of other Australian regulators.<sup>2</sup> The ENA notes that since this decision, there has been a net reduction in the number of listed comparators (and consequentially, useful market data) in the Australian market – with the delisting of United Energy.

The ACCC has similarly noted the statistical imprecision of equity beta estimates based on market evidence. In recent energy transmission decisions it has consistently adopted estimates in a range between 0.98 and 1.2, with each of its recent electricity transmission revenue cap decisions being based on estimates of 1.0. Most recently, the ACCC has reaffirmed its approach of placing greater weight on past regulatory precedent and avoiding under-compensation of service providers through the use of beta values calculated during periods of possible short-term deviation from historical norms. In its December 2004 *Statement of Regulatory Principles for the Regulation of*

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<sup>2</sup> Victorian Essential Services Commission *Review of Gas Access Arrangements – Final Decision*, October 2002, p.361

*Transmission Revenue* it has signaled its intent to continue to apply an equity beta estimate of 1.0.<sup>3</sup>

In January 2005 the WA Economic Regulation Authority released a report *Electricity Networks Access Code 2004: Advance Determination of a WACC Methodology*, prepared by Allens Consulting Group. This report contains recent analysis by Allens Consulting Group, completed following its advice to the QCA on cost of capital estimates for Ergon Energy and ENERGEX. Several elements of the report are directly relevant to the QCA's task of selecting an appropriate equity beta estimate.

- first, Allens Consulting warns that the use of a shorter time period and more frequent sampling to attempt to remove the impact of unusual events 'may create econometric problems' and a downward bias in the beta estimate<sup>4</sup>
- second, it is noted that the most commonly utilised commercial approach is to use 4-5 years of monthly returns<sup>5</sup>
- third, that Allens Consulting saw no reason to alter its previous recommendation to the ACCC of an appropriate equity beta being around 1.0<sup>6</sup>

Given the re-endorsement in the report to the ERA by Allens Consulting group of its previous recommendation of an appropriate equity beta of 1.0, the ENA queries on what basis the same consulting group derived a materially different equity beta for Queensland electricity distribution companies than for Western Power which shares many operational characteristics with Ergon and ENERGEX.

#### ***Appropriate approaches to addressing uncertainty***

The ENA recommends an approach to deriving an equity beta estimate that appropriately recognises both the significant methodological issues problems with obtaining market estimates of beta and the medium term risk to consumers from regulatory error leading to underinvestment in electricity networks. In the context of recent developments in Queensland, the ENA considers a high priority should be placed on avoiding potential underinvestment.

The ENA proposes that in deriving an equity beta estimate for its Final Determination the QCA should:

- give primary weight to the desirability of consistency with previous regulatory decisions
- use market evidence only as a secondary and intermediate input into a final estimate

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<sup>3</sup> ACCC *Statement of Regulatory Principles for the Regulation of Electricity Transmission Revenue*, December 2004, p.108

<sup>4</sup> Allens Consulting Group *Electricity Networks Access Code 2004: Advance Determination of a WACC Methodology*, Report to the WA Economic Regulation Authority, January 2005, p.34

<sup>5</sup> Allens Consulting Group (2005), p.35

<sup>6</sup> Allens Consulting Group *Empirical Evidence on the Proxy Beta Values for Regulated Gas Transmission Activities - Final Report*, July 2002, p.6

- in determining an indicative equity beta estimate drawn from market evidence use estimates from the upper bound of plausible ranges derived from common commercial approaches to beta estimation to ensure there is a less than 50 per cent chance of underestimation

In ENA's view this approach would be likely to result in an equity beta of 1.0.

## **Proposed treatment of efficiency gains**

The treatment of efficiency gains in the Draft Determination is a strong area of concern for the ENA, due to its potential to impact negatively on future investment in energy networks across Australia.

The QCA's Draft Determination seeks to respond to a very difficult array of circumstances detailed fully in the findings of the Somerville report. The ENA understands and concurs with the QCA's desire to avoid any possibility of Queensland electricity customers being forced to 'pay twice' for service quality maintenance or improvements. Importantly, however, the ENA considers that this outcome can be achieved without the adoption of approaches which destroy incentives for future efficiency gains.

### ***Approach of the Draft Determination***

The Draft Determination proposes to:

- reduce ENERGEX's future allowable operating costs by \$104.7 million, the amount of its expected 'under spend' for the current regulatory period
- effectively assume that ENERGEX made no efficiency gains which should be retained to create incentives for further efficiency gains
- adopt BRW forecasts which are based on continued achievement of efficiency gains valued at \$19.3 million over the 2005-04 to 2009-10 regulatory period.

This approach has been proposed despite the QCA accepting that ENERGEX did probably make some real efficiency gains over the previous regulatory period – gains which under the QCA's 2001 determination, ENERGEX could legitimately have expected to benefit from.<sup>7</sup>

### ***Weaknesses in the proposed approach***

The QCA's approach has significant implications for the development of Australian utility regulation and for the operation of incentive based regulation. Key weaknesses of the QCA's approach are that it:

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<sup>7</sup> Queensland Competition Authority *Regulation of Electricity Distribution – Draft Determination*, December 2004, p.133

- appears inconsistent with the National Electricity Code objective of providing for an incentive based regulatory framework<sup>8</sup>
- negatively impacts on incentives for Queensland energy network businesses to pursue efficiency gains over the next regulatory period
- represents a breach of the regulatory compact underpinning the QCA's 2001 Final Determination
- fails to fairly allow ENERGEX to benefit from the real efficiency gains which QCA accepts as likely to have arisen over the previous regulatory period
- represents a retrograde movement towards an 'ex post' or 'rate of return' style of regulation rather than one focused on providing adequate total allowable revenue on a prospective basis
- appreciably increases the overall level of regulatory risk faced by all Australian utility service providers, given the potential for this decision to serve as a precedent for similar approaches in the future by other regulatory bodies
- fails to establish a transparent, replicable and fair basis for assessments on the carryover of past efficiency gains, and instead substituting a subjective test of whether the service provider has exhibited behaviour which is 'deserving' of 'being rewarded'
- is justified by reference to an untested claim that the magnitude of gains cannot be accurately established
- is inconsistent with any of the analysis or approaches to efficiency gains in the QCA's own current inquiry into efficiency carryover mechanisms.

The QCA Draft Determination also seeks to offset anticipated criticism of this unprecedented regulatory action by claiming that it has provided ENERGEX with a notional recognition of efficiency gains through its conservative decision to deduct a lower nominal value of operating expenditure under spend from ENERGEX's forward revenue.<sup>9</sup> The decision states that by this approach 'some value has certainly been left with ENERGEX', later specifying that under this methodology ENERGEX had benefited by around \$15 million.

Several aspects of this apparently crude regulatory 'balancing' process are of concern to ENA. One central concern is that it is unclear how the QCA can be satisfied that its conservative assumptions have ameliorated the negative impact of disallowing the retaining of efficiency gains, and also justify this disallowance on the basis that the magnitude of past efficiency gains is unclear.

### ***Implications for wider regulatory practice and investment risk***

The Draft Determination seeks to provide assurance that the controversial decision it has adopted is made only in the light of the unique circumstances facing the QCA in this price review process.

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<sup>8</sup> See National Electricity Code, Section 6.10.2

<sup>9</sup> QCA (2004) p.134

The QCA states:

In making this decision, the Authority emphasises that it in no way may be taken to set a precedent regarding the future treatment of any opex savings, particularly those associated with true efficiency gains. Had Energex’s expenditure reflected real and sustainable efficiency gains the Authority would not have entered down this path.<sup>10</sup>

While this is a positive statement of future intention it must be recognised that, if the QCA retains its proposed approach in this area, the statement is unlikely to provide significant assurance to either network service provider about the QCA’s future conduct.

In making investment and business decisions which will impact on future efficiency gains it is likely that responsible management of these organisations will look to the QCA’s past record of regulatory practice, rather than its non-binding statement of future regulatory intent, in judging likely regulatory outcomes. This is even more likely to be the case if the QCA chooses in this matter to depart from its previous statements of regulatory intent and fail to seek to credibly quantify and recognise past efficiency gains.

While the QCA seeks to downplay the potential precedential weight of its proposed approach it is likely that any action to retrospectively deny the retaining of any portion of likely past efficiency gains will promote an increase in the overall level of regulatory risk faced by energy networks. This increased risk will arise because of the possibility that in the future other regulatory bodies may seek to use the QCA’s action as a precedent to support similar retrospective confiscation of achieved efficiency gains. In this way the consequential impacts of the QCA’s approach are national in scope, and if the QCA adopts its proposed approach industry will argue strongly that future cost of capital assessments should include recognition of the increased level of non-diversifiable risk which has been created by the QCA.

**Table 2 – Australian regulatory approaches to efficiency gains**

Jurisdictional regulator	Sector	Approach to efficiency gains
ACCC	Electricity and gas transmission	Five year retaining of under-spending of capital and operating benchmarks
Victorian Essential Services Commission	Electricity and gas distribution	Automatic five year retaining of any under-spend of forecast capital and operating benchmarks
IPART	Electricity and gas distribution	Retaining of within period efficiency gains
Economic Regulation Authority of Western Australia	Electricity and gas distribution	Retaining of within period efficiency gains
Essential Services Commission of South Australia	Gas distribution	Ten year retaining of under-spending of capital and operating benchmarks
Queensland Competition Authority	Electricity distribution	Retrospective removal of achieved within period efficiency gains on basis of service provider not being ‘deserving’ of reward

<sup>10</sup> QCA (2004) p.128

### ***Recommended alternative approach to efficiency gain***

The ENA recommends that the QCA's proposed approach in relation to the treatment of efficiency gain be altered to introduce two fundamental elements:

- first, quantification and recognition in forward revenues of any efficiency gains achieved by Ergon and ENERGEX in the previous regulatory period
- second, development of a credible, robust and cost-effective service quality incentive mechanism which can be used to transparently judge service performance and which offers genuine incentives for any achieved out-performance of minimum standards

It is the ENA's view that an approach based on these elements will better protect the long term interests of consumers, particularly their interests in ongoing service quality and reliability enhancement, and the preservation of incentive-based regulation.

### **Proposed treatment of depreciation allowances**

Another area in which the QCA appears to be failing to apply a forward looking prospective model of regulatory pricing is in its proposed treatment of depreciation allowances.

Due to revised asset lives, the initial regulatory asset bases for Ergon Energy and ENERGEX have been adjusted in the Draft Determination (as allowed for under the Electricity Code). The QCA has taken the extraordinary additional step of seeking to retrospectively remove \$99.0 million of claimed 'windfall gains' flowing from the new information on extended asset lives put forward by the QCA's own commissioned consultants. It has undertaken this step without considering the flow-on implications – for example, the fact that taking the step the QCA proposes to take gives rise to a retrospective 'windfall loss' flowing from the impact of the changed depreciation assumptions on the return on assets component of the revenues of the two service providers. Adjusting for one 'windfall' and not the other would result in an incomplete and internally inconsistent final decision.

The adjustment of a service providers' forward looking revenue stream on the basis of new information on changed asset lives and claimed windfall gains over a previous regulatory period represents a significant departure from the principles of prospective incentive-based regulation. It also gives rise to significant uncertainty over whether this approach would be applied symmetrically, were asset lives for significant infrastructure components found to be significantly shorter than assumed in existing depreciation allowances. As the QCA notes, the Australian Competition Tribunal in its decision on GasNet has also recently queried the appropriateness of *ex post* adjustments to DORC valuations of a regulated asset base.<sup>11</sup>

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<sup>11</sup> QCA (2004) p.117

The ENA considers that this ad hoc, *ex post* adjustment is a retrograde regulatory intervention which implies that the QCA is applying a ‘rate of return’ style of regulation which is contrary to the basis of the existing regulatory framework.

The Energy Networks Association  
25 February 2005