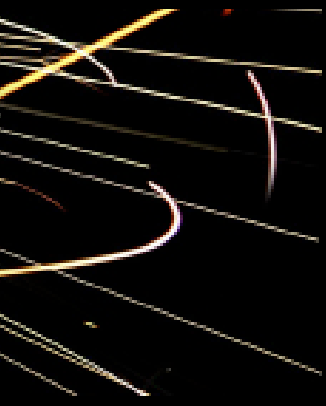




SUMMARY OF ISSUES

RATE OF RETURN GUIDELINE



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SUMMARY OF ISSUES

RATE OF RETURN GUIDELINE

1. PURPOSE AND BACKGROUND

This document provides a high-level summary of the comprehensive submission provided by the Energy Networks Association (ENA) on issues raised in the AER Consultation Paper *Rate of Return Guidelines*. It has been prepared to assist the AER Consumer Reference Group in its assessment of various stakeholders' perspectives.

The summary suggests further reading where additional detail is sought. This identifies the relevant components of the ENA's submission and supporting expert reports that may be of interest.¹ Further, Attachment 1 provides a collation of 'key positions' identified in the submission.

The full ENA submission can be found here: www.ena.asn.au/

2. OPPORTUNITY FOR THE RATE OF RETURN GUIDELINE PROCESS

The guideline process has the potential to provide strong benefits to consumers, the AER and industry. In the network industry's view the guideline represents an opportunity for the AER to:

- » provide critical guidance on its interpretation and application of key rate of return rule provisions;
- » enshrine cost of equity and cost of debt approaches that deliver lower volatility in revenue and prices to consumers through time, and more closely match efficient financing approaches and investors' perspectives;
- » adopt a rate of return estimation approach that better draws on a wider available set of relevant estimation methods, models, market data and other evidence to deliver a more robust, stable and predictable estimate; and
- » transparently define how empirical and theoretical evidence will be considered and reconciled to reach a high quality estimate of the rate of return.

In this context, the Guideline has the potential to promote investment certainty and efficient financing of long-term infrastructure assets. These are the criteria on which industry will assess the draft and final guideline.

ENA considers that customers have an interest in ensuring that rate of return outcomes are efficient and that they are not unduly volatile. It is clear that most customers highly value pricing stability. The regulatory framework should support this objective, and ENA has proposed approaches to estimating the cost of debt and equity with this goal in mind.

¹ These are accessible at: <http://www.aer.gov.au/node/18859>

3. APPLYING THE NEW REGULATORY FRAMEWORK FOR RATE OF RETURN

The new rules² require the AER to have regard to a full range of relevant methods, financial models, market data and other evidence. This is a fundamentally different requirement than that which previously existed in electricity regimes. It is also different to how the gas rules have been interpreted by the AER and merit review bodies. It would not be consistent with the new regulatory rules if the rate of return estimation process was to remain essentially unchanged following the AEMC's amendments.

Consequently, the AER will require a wider set of information in making rate of return determinations. A strength in this approach is that it is likely to mean stable cost of capital estimates through time and lower volatility providing more stable investment signals, to the benefit of consumers. This reduction in volatility was a key benefit highlighted by the Energy Users Rule Change Committee in their promotion of rule changes to allow for movement to a trailing average approach to cost of debt estimation.

Suggested further reading

Further details of these issues can be found in Section 3 of the ENA submission (p.9-18).

4. WHAT THE GUIDELINE NEEDS TO CONTAIN

Consistent with the AEMC's rule change, the guideline should increase the predictability of the rate of return estimation, making it possible for a service provider or stakeholder to make a reasonably good estimate of the rate of return that would be approved by the AER.

It is acknowledged that the guideline cannot provide complete certainty and some areas of regulatory discretion are inevitable. However, the guideline should set out the methodologies, models, data and relevant evidence as far as reasonably possible to maximize the certainty that can be provided. This would also minimize the need to revisit issues at the time of individual regulatory proposals.

Suggested further reading

Further details of these issues can be found in Section 3.1 and 4.1 of the ENA submission (p.10 and p.19-21).

² References to the 'rules' in this document should be taken to include references to each of the identical set of rate of return provisions now applying for electricity transmission, electricity distribution and gas distribution. Similarly, references to objectives and revenue and pricing principles in the 'Law' should be taken to be inclusive of the equivalent provisions across both the *National Electricity Law* and the *National Gas Law*.

5. LEGAL FRAMEWORK FOR AER GUIDELINE DECISIONS

In the making of the Guideline and in its use, it is essential that the AER correctly reflect the relevant legal context of the Rules, Laws and other regulatory considerations. The AER's consultation paper appears to introduce considerations for the Guideline that are incorrect.

It is clear that the allowed rate of return objective specified in *National Electricity Rule* Clause 6.5.2 (and equivalent provisions in gas) is, and was intended to be, the primary guiding objective for decisions by the AER on rate of return issues.

The National Electricity Objective (NEO), National Gas Objective (NGO) and revenue and pricing principles (RPP) in the electricity and gas laws can assist in interpreting that rate of return objective where there is uncertainty in its application. However, they should not be used to infer additional "criteria" or "principles" unless the policy intent to do so is unambiguous. Some of the AER's suggested criteria for the development of the Guideline (such as favoring "simplicity over complexity" or 'well-accepted' models) do not reflect a correct interpretation of how specific rules apply in the context of broader principles and objectives in the *National Electricity Law* or *National Gas Law* and do not have any clear foundation in the NEL, NGL or either the electricity or gas Rules.

In ENA's view ensuring a sound, legally robust understanding of the legal framework is the starting point to good decision-making.

Suggested further reading

Further details of these issues can be found in Section 3 of the ENA submission (p.9-18).

6. APPROACH TO ESTIMATING A COST OF EQUITY UNDER THE NEW RULES

The Rules require the AER to use all relevant evidence to obtain an estimate of the required return on equity. Of the four approaches identified by the AER in its *Consultation Paper*, two options appear demonstrably inconsistent with the requirements of the Rules and one option is yet to be defined sufficiently by the AER to confirm it could be implemented in a manner consistent with the Rules.

The 'one model' (Approach 1) method in the AER *Consultation Paper* does not comply with the Rules, because it ignores the AEMCs requirement to take into account relevant models and evidence. The 'several models with fixed weightings' (Approach 3), in our view, would be impractical to implement and inconsistent with the Rules requirements to consider models, market data and evidence against the backdrop of prevailing market condition.

It is unclear how the AER can practically implement a 'primary model with reasonableness checks' (Approach 2) option in a way that meets the Rules requirements. This is because it is currently unclear what role reasonableness checks apply in the cost of equity estimation process. For example, it is unclear what practically happens if a check is failed, how many checks should apply and whether these are weighted. It is unclear how many checks need to be passed or failed to lead to the AER affirming or adjusting an estimate, or how an estimate would be adjusted. If any adjustment to the cost of equity estimate arising from an estimate 'failing' a cross check is to simply apply a different model or piece of evidence, it would appear that what is being applied is a *different* primary model. ENA has raised these questions for discussion and clarification with the AER to seek to allow a full assessment to be made of Approach 2.

Suggested further reading

Further details of these issues can be found in Section 3.3 and Section 4.2.

7. PROPOSAL – A ‘MULTI-MODEL’ APPROACH TO ESTIMATING THE COST OF EQUITY

The network sector is proposing a ‘multi-model’ or ‘portfolio’ approach to the AER. The approach proposed has four key steps:

1. Identifying the models, methods, data and evidence to use;
2. Computing the best estimate of required return for an average firm;
3. Computing best estimate of required return for a benchmark firm using each approach and piece of evidence; and
4. Distilling a final estimate of the required return.

This approach accords most closely with a modified form of Approach 4 as described in the *Consultation Paper*. The network industry supports this approach over the others because it results in a more stable cost of equity estimate that is more informed by wider set of evidence than either a ‘single model’ or ‘primary model with reasonableness checks’.

Four models (Sharpe-Lintner CAPM, the Fama-French 3-factor model, Black CAPM and the dividend growth model (DGM)) should be considered when estimating the required return on equity under the new Rules and applying the multi-model approach. The ENA bases this view on an expert assessment of the strengths and weaknesses of each of these approaches conducted by NERA Consulting.

Using cost of equity estimates from a ‘portfolio’ of models and evidence also means an estimate will be less driven by any flaws or weaknesses in any single model. It recognises the imperfection of all models and evidence, and ‘diversifies’ this risk of error.

As an example, the existing Sharpe-Lintner CAPM, applied in the manner that the AER currently adopts, indicated during the Global Financial Crisis that the required return on equity fell considerably during this period of substantial equity market losses, a plainly counterintuitive result.

ENA’s multi-model approach is consistent with comments made by Graeme Partington (Chair of Finance Discipline, University of Sydney) at the Cost of equity workshop, held by the AER in June, that ideally one should use a ‘portfolio’ of estimation methodologies to obtain the best quality estimate.

An important part of industry’s suggested approach is Step 2, determining the required return of an average firm. This step is included to provide the opportunity for the AER to ensure that the assumptions and inputs of each model are consistent, to ensure that different model estimates reflect model differences, not different estimates of the same market wide parameters. This enables a process of ‘stress testing’ and clarity around each models’ assumptions to occur.

The final step of the multi-model approach involves the AER assigning weights to the estimates and other evidence it has gathered. These weights would be based on the assessed empirical quality of each of the estimates in Step 3. This weight may change across individual review process according to changing or new evidence, or the AER’s view of prevailing market conditions in equity markets.

There will always remain a final discretionary element to these assessments. The critical matter is that the AER provides clear reasons for why it has accorded weight to particular models, data and evidence. A mechanistic approach that applies a single model, or multiple models with pre-set or arbitrary weightings is not favoured by ENA because it obscures the exercise of regulatory discretion and/or permits internally inconsistent outcomes. It is the capacity to identify clear reasons for the final estimate, based on sound theoretical and empirical evidence that delivers greater certainty and predictability.

Suggested further reading

The ENA submission provides a fully specified working example of how the multi-model approach could be used to determine a current cost of equity, using consistent data estimates by a range of experts. This example is contained in Section 4.5.

The primary evidentiary material used to inform this multi-model approach and the background to the methodologies and parameter assumptions used can be found in 4.1-4.5 of the ENA submission and Reports 1-11, 14 and 15.

8. COST OF CORPORATE INCOME TAX – ASSESSMENT OF GAMMA

The rate of return guideline process is reviewing the current AER practice of setting the so-called ‘gamma’ parameter. This parameter feeds into the estimation of the corporate tax liability of network businesses under the building block methodology set out in the *National Electricity Rules* and *National Gas Rules*. It does so by affecting the forecast corporate tax liability to take account of the value of imputation credits accruing to Australian tax paying entities.

The ENA agrees with the position taken in the *Consultation Paper* – that the gamma parameter should be considered as part of the Rate of Return Guideline and that gamma should be estimated as the product of two components – the distribution ratio (F) and the value of a distributed credit (\emptyset).

The ENA has commissioned an updated assessment of the ‘gamma’ parameter based on the outcomes of the Australian Competition Tribunal’s most recent considerations on appropriate estimation methodologies and techniques. The value suggested by our expert evidence using these agreed methodologies and techniques is 0.245, comprising an empirical estimate of a distribution rate of 0.7 and a value of distributed credit of 0.35.

Suggested further reading

Further details of these approaches and estimates can be found in Section 4.6 of the ENA Submission and Reports 12 and 13.

9. APPLYING THE NEW COST OF DEBT FRAMEWORK

The guideline process represents an opportunity for the AER to review new, feasible cost of debt approaches and use the greater flexibility provided in the Rules.

The assumptions made by regulators in cost of debt estimates should reflect market practices, including the practices of network firms. These assumptions should be consistent with the method used, and the data used to estimate the cost of equity. For example, the benchmark credit rating used by the AER in setting a cost of debt should be achievable using the cashflows that result from the AER’s cost of equity assumptions. Types of debt assumed in the cost of debt benchmark should also reflect the practices of networks.

The current 60% benchmark gearing assumption made is consistent with business practice. However, given the AER’s current approach to estimating the cost of equity for a 60% geared company, the resulting cash flows are inconsistent with the benchmark entity obtaining a BBB+ credit rating. The ENA notes that to some extent the AER’s approach to the cost of equity estimation has, due to very low cost of equity allowances, exacerbated this problem. Depending on the impact of any changes to the AER’s cost of equity methodology it may be possible to support a benchmark credit rating of higher than BBB/BBB-.

A maturity assumption of 10 years continues to provide an appropriate benchmark. In terms of the types of debt issues, networks issue debt in both domestic and international markets and issue a mix of ‘non-callable’ and ‘callable’ debt. To the extent that the AER decides to carry out its own estimates of the cost of debt it should take these forms of debt into account.

The yield on benchmark debt issuance should be estimated using a credible third party estimate of comparable fair value yields. The best source of such an estimate currently available is the Bloomberg BBB fair value curve, extrapolated from 7 to 10 years.

An alternative or adjunct to the Bloomberg fair value curve is estimation of a ‘fair value curve’ by the AER from individual bond yield estimates published by Bloomberg. Sampling approaches similar to those used by the WA Economic Regulation Authority and the NSW Independent Pricing and Regulatory Tribunal should be avoided. These approaches unnecessarily exclude data from the sample and do not use robust econometric techniques to adjust for differences between the bonds in the sample.

Suggested further reading

Further details of these approaches and estimates can be found in Sections 5.1-5.3 of the ENA Submission and Reports 16, 17, 18, 20 and 21

10. ALLOWING FOR A TRAILING AVERAGE COST OF DEBT APPROACH

Networks generally accept that the trailing average cost of debt is a desirable approach for the majority of businesses. A trailing average cost of debt allowance will better reflect the actual efficient financing practices of these businesses.

A trailing average approach will also lower volatility in revenues and prices between regulatory resets. It will only do this if it is implemented with a mechanism to ensure that annual variations in the cost of debt are reflected in a timely change to the regulatory allowance.

However, there is not a 'one size fits' approach, The circumstances of some networks mean that they consider a different approach will better reflect their own efficient debt management practices. Given this, the guidelines should set out the AER's approach to the three possible benchmarks outlined in the Rules ('trailing average', 'on the day' or a hybrid of the two approaches).

This would not preclude the AER from stating that it considers one of these benchmarks to be, in general, superior to the others. If the AER were to choose to include only the trailing average methodology in the guideline, it would need to make clear how this could be made to work in practice for all businesses.

Industry support for a trailing average approach is conditional on automatic updating, both during any transitional period, and during following regulatory periods. The revenue and pricing volatility as well as cash-flow implications of potentially significant mismatches between actual and benchmark costs arising from a lack of updating strongly suggest this approach is to be preferred.

The new Rules deliberately included a mechanism for such updating to occur, based on previous recognition of these issues, and this flexibility should be used.

Suggested further reading

Further details of these approaches and estimates can be found in Section 5.4 of the ENA Submission and Report 17, 18, 19 and 20

11. TRANSITIONS TO ANY NEW COST OF DEBT APPROACHES

Any transition arrangements need to be fair and reasonable.

These considerations may require the AER to take into account the individual circumstances of the business in question. In some circumstances, it may be that no transition is required if the business already uses a debt approach consistent with an efficient benchmark or this is the best way of facilitating a business to hedge its efficient interest costs to the regulatory allowance.

For this reason it is considered that the guidelines should outline appropriate transitional provisions to provide certainty for business and provide businesses with an opportunity to prepare for transition to any new methodology.

Suggested further reading

Further details of these approaches and estimates can be found in Section 5.5 of the ENA Submission and Report 17

The Energy Networks Association
7 July 2013

ATTACHMENT 1: ENA KEY POSITIONS

KEY POSITION 1

The new Rules place fundamentally different obligations on the AER than existed under the previous Rules. In electricity, the previous Rules were prescriptive and in gas, the previous Rules were interpreted in a way manner that narrowed the methodologies that were considered for use. By contrast, the new Rules require that the AER “must have regard” to the full range of relevant methods, financial models, market data and other evidence.

KEY POSITION 2

The allowed rate of return objective has primacy in guiding the estimation of the rate of return. The NEO, NGO and RPP can assist in interpreting that objective where there is uncertainty in its application. However, these should not be used to infer additional “criteria” or “principles” unless the policy intent is unambiguous.

KEY POSITION 3

The ENA submits that it is the clear intention of the AEMC that the AER should not persist with its previous Sharpe-Lintner CAPM-based approach for determining the allowed return on equity.

KEY POSITION 4

The ENA submits that Approaches (1) and (3) are either inconsistent with the Rules, inconsistent with the clear intention of the AEMC, or impractical or impossible to implement. Unless the AER makes it clear in the guideline how Approach (2) would properly take into account all of the relevant other methods, models, data and evidence, it would also be inconsistent with the Rules, the AEMC’s intention and be impractical and/or impossible to implement. The ENA submits that a form of Approach (4), with some modifications to the approach set out in the AER’s Consultation Paper, is the only workable approach.

KEY POSITION 5

The ENA submits that an approach that considers all relevant estimation methods, financial models, market data and other evidence, and which gives appropriate weight to each piece of evidence based on all available information, in a transparent, predictable and replicable way, is most likely to achieve the overall rate of return objective and therefore be consistent with the Rules. Such an approach would lead to more stable cost of equity estimates through time and more reliable estimates of the prevailing cost of equity thereby providing more stable investment signals and prices, which benefits consumers.

KEY POSITION 6

The ENA has previously submitted that four models (Sharpe-Lintner CAPM, the Fama-French 3-factor model, Black CAPM and the dividend growth model (DGM)) should be considered when estimating the required return on equity under the new Rules and confirms that it remains of that view.

KEY POSITION 7

The ENA submits that for any reasonableness check or other piece of evidence to be considered relevant, it must have some prospect of having some effect on the allowed return.

KEY POSITION 8

The ENA submits that it is impossible to use trading multiples to draw any conclusion about the allowed return on equity without first quantifying the effect of all other components of the trading multiple. If trading multiples are to be used, the AER should explain precisely how that evidence could cause an allowed return on equity to be different from what it would have been otherwise and how it would quantify the change that it would make to the allowed return that it would otherwise set

KEY POSITION 9

The ENA submits that it is impossible to use transaction multiples to draw any conclusion about the allowed return on equity without first quantifying the effect of all other components of the transaction multiple. If transaction multiples are to be used, the AER should explain precisely how that evidence could cause an allowed return on equity to be different from what it would have been otherwise and how it would quantify the change that it would make to the allowed return that it would otherwise set.

KEY POSITION 10

The ENA submits that if broker discount rates are to be used, the AER should explain precisely how that evidence could cause an allowed return to be different from what it would have been in the absence of that evidence – what would the evidence have to show before it would lead the AER to set an allowed return different from what it would otherwise be, and how would the AER quantify the extent of the adjustment that would be made?

KEY POSITION 11

The ENA submits that past regulatory decisions cannot be used as a reasonableness test. At best, they can be used as a test of consistency – that the same evidence leads to the same outcome. If past regulatory decisions are to be used as a reasonableness test, the AER should explain precisely how that evidence could cause an allowed return to be different from what it would have been in the absence of that evidence – what would the evidence have to show before it would lead the AER to set an allowed return different from what it would otherwise be, and how would the AER quantify the extent of the adjustment that would be made.

KEY POSITION 12

The ENA submits that the expected return on equity should be higher than the expected return on debt for all investors in the benchmark firm. To the extent that the AER considers there to be a material chance of the benchmark firm defaulting, the probability of default should be quantified so that the allowed return on equity can be grossed-up accordingly.

The ENA submits that redemption rates cannot be used for any purpose other than as an upper bound for theta.

KEY POSITION 13

The ENA agrees that financeability and credit metrics should not be used as an ex post reasonableness test. Rather, that information should be used to ensure that the estimates of gearing, credit rating and debt issuance (and other related) costs are robust and internally consistent.

KEY POSITION 14

The ENA submits that survey evidence in general should be tested against the criteria set out by the Tribunal.

KEY POSITION 15

At this point, the ENA submits that independent expert valuation reports do contain relevant evidence that can inform the estimation of the required return on equity for the benchmark firm.

KEY POSITION 16

The ENA submits that the Rules require the regulator to use all relevant evidence to obtain the best possible estimate of the ex ante required return on equity, and this will result in more stable regulatory allowed returns and prices and less over- or under-compensation.

KEY POSITION 17

The ENA submits that a ten year risk-free rate continues to be consistent with theory and observed financing practice, and this proxy must be implemented consistently across AER analysis.

The ENA also submits that the annualised contemporaneous yield on 10-year Commonwealth Government Securities continues to be an appropriate proxy for estimating the risk-free rate.

The ENA further submits that, to preserve internal consistency, whatever term is used to estimate the risk-free rate, that same term must be used when estimating the historical average market risk premium or expected return on the market.

KEY POSITION 18

The ENA agrees with the position taken in the Consultation Paper – that the gamma parameter should be considered as part of the Rate of Return Guideline.

KEY POSITION 19

The ENA agrees that gamma should be estimated as the product of two components – the distribution ratio (F) and the value of a distributed credit (\emptyset).

KEY POSITION 20

The ENA submits that, other than the ACCC's analysis of the actual firm-specific practice of Telstra, no regulator has performed any estimation of gamma since the Tribunal's decision.

KEY POSITION 21

The ENA submits that the AER should either continue its regulatory precedent of estimating gamma as a market-wide parameter or examine the actual payout ratio and the actual shareholder base of the relevant firms as a key aspect of its measurement of theta, as the ACCC did in the Telstra case. If the approach in Telstra which uses a combination of an industry specific payout ratio with a market-wide estimate of theta were used in a decision applying the NER or the NGR, it would be in error.

KEY POSITION 22

The ENA submits that 0.7 remains the best empirical estimate of the distribution rate.

KEY POSITION 23

The ENA submits that the distribution rate (like all other WACC parameters) should be estimated on the basis of empirical evidence and not on the basis of speculative assumptions that are inconsistent with all available evidence.

KEY POSITION 24

The ENA submits that theta, like every other WACC parameter, should be estimated as a market value. The *amount* of distributed credits should not be used in place of the market *value* of those credits.

KEY POSITION 25

The ENA submits that the best available dividend drop-off estimate of theta is 0.35.

KEY POSITION 26

The ENA submits that redemption rates cannot be used for any purpose other than as an upper bound for theta.

KEY POSITION 27

The clear policy intention of the AEMC³, as reflected in the final Rules 6.5.3, 6A.6.4 and 87A, is that the allowed rate of return to be determined on a nominal vanilla WACC basis with proper regard to dividend imputation (gamma). The explicit exclusion of the current prescription of the gamma value of 0.5 is intended to allow the regulator the ability to estimate an appropriate value that reflects the best available evidence at the time of a decision and would therefore result in a rate of return that meets the overall objective. The ENA submits that appropriate regard should be given to all relevant evidence.

KEY POSITION 28

The ENA submits that the market practitioner estimate of the (ex-imputation credits) required return on equity is highly relevant evidence to corroborate the outcome of the work separately estimating a discrete gamma variable in the CAPM. At a minimum, having regard to all the available evidence, the market practitioner estimate should be compared with the AER estimate and the reasons for any differences should be considered and explained.

KEY POSITION 29

The characteristics of the assumed debt issued by a benchmark business should, ideally, reflect the practices of NSPs. The characteristics of debt issued should also be internally consistent with the method and data used to estimate the cost of equity. This means that the benchmark credit rating should be achievable given the cash-flows generated by a cost of equity allowance and also the type of debt issued should reflect the practices of NSPs used to estimate the cost of equity.

In relation to gearing, the current 60% benchmark gearing is consistent with business practice. However, given the AER's current approach to estimating the cost of equity for a 60% geared company, the resulting cash-flows are inconsistent with the benchmark entity obtaining a BBB+ credit rating. On this basis the ENA considers that the benchmark credit rating should be BBB/BBB-. The ENA notes that to some extent the AER's approach to the cost of equity estimation has, due to very low cost of equity allowances, exacerbated this problem. Depending on the likely impact of any changes to the AER's cost of equity methodology it may be possible to support a benchmark credit rating of higher than BBB/BBB-.

A maturity assumption of 10 years continues to provide an appropriate benchmark. In addition, the ENA notes that NSPs issue of debt in markets both domestically and internationally and issue a mix of non-callable and callable debt. To the extent that the AER were to perform bespoke estimates of the cost of debt it should not exclude such debt from those estimates.

KEY POSITION 30

The ENA believes that the yield on benchmark debt issuance should be estimated using a credible third party estimate of comparable fair value yields. The best source of such an estimate currently available is the Bloomberg BBB fair value curve (extrapolated from 7 to 10 years).

An alternative/adjunct to the Bloomberg fair value curve is estimation of a fair value curve by the AER from individual bond yield estimates published by Bloomberg.

³ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Position Paper*, 29 November 2012, Sydney, page 68.



Energy Networks Association

P +61 2 6272 1555 **E** ena.update@ena.asn.au

Level 1, 110 Giles Street, Kingston ACT

www.ena.asn.au