

Australian Energy Regulator

Better Regulation

Rate of Return Guidelines

Comments on the Consultation Paper

Submission by

The Major Energy Users Inc

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TABLE OF CONTENTS

	PAGE
Summary of MEU views	3
1. Introduction	4
2. A criteria based approach	9
3. Overall rate of return	12
4. Benchmark firm and risk	21
5. Return on equity	33
6. Return on debt	38
7. Other issues	49

Summary of MEU views

The Major Energy Users Inc (MEU) welcomes the opportunity to comment on the AER's Issues Paper on Rate of Return Guideline.

Overall, the MEU considers the AER Consultation Paper addresses the issues well and provides a clear indication of the direction the AER proposes for its draft guideline. The MEU is also satisfied with the AER's consultations with stakeholders on alternative models to the SL CAPM currently used and is agreeable to the retention of the CAPM as the model for formulating the rate of return for regulated network service providers.

The main difference of views between the MEU and the AER is that what the AER proposes in the development of the rate of return inputs to the CAPM can be either an unacceptable simplification of a complex issue or an outcome which is in favour of the regulated NSPs. In a number of places the AER proposes to use modelling which does not reflect the empirical data seen in the wider market. The MEU considers that empirical outcomes must guide the implementation of modelling outputs.

In general, the AER approach is overly reliant on theoretical modelling that requires simplifications and assumptions to enable modelling that it can limit the reliability of the outputs. It is because of this that the MEU continues to approach the issue of the return on debt on a revealed cost basis, as this does reflect the actuality of the many aspects where modelling is impossibly complex and has to be so over-simplified to render the results questionable.. The MEU considers that a revealed cost approach with an incentive scheme applied to ensure that NSPs are incentivised to minimise the cost of debt (ie to be efficient), will result in an allowed cost for debt that most closely reflects the actual cost of debt incurred by NSPs.

If the actual cost of debt incurred by an NSP is lower than the allowed cost of debt, empirically the allowed cost of debt is not efficient. But if the revealed cost of debt is higher than the allowed (efficient) cost of debt than incentives ought to be introduced to achieve efficiency.

Incentive regulation requires the benefits of more efficient practices by NSPs to be passed to consumers over time. The revealed cost approach achieves this whereas the AER approach seeks to incentivise the NSP to be more efficient with its financing practices yet does not require the passing, over time, of these benefits to consumers.

The MEU would welcome the opportunity to discuss with the AER its revealed cost approach in more detail.

1. Introduction

The Major Energy Users Inc (MEU) welcomes the opportunity to provide input into the AER review of the Rate of Return (RoR) guideline that it is required to develop as a result of the recent changes in network regulation in the National Electricity and Gas Rules. The MEU also welcomes the AER's consultations with stakeholders on alternative funding models and particularly welcomes the AER's approach of continuing with the CAPM. It is a model that MEU member companies are familiar with (including the fact that it is a funding model used by MEU member companies).

In its response to the Issues paper on this topic, the MEU highlighted that it has based much of its response on feedback from its members and the knowledge they have imparted regarding their views on returns on equity and the way the provision of debt is treated. To avoid reiterating this, the MEU response to the Consultation Paper should be read with these views in mind.

1.1 An overall view of the Consultation Paper

The MEU considers that, as a source document for further investigation, the AER has developed some well informed discussion on the issues. In a number of areas the MEU considers the AER has reached conclusions the MEU considers are soundly based. Because of this the MEU has focused on those aspects where it considers the AER has reached conclusions that are not supported by the evidence or where the conclusions are contrary to the intent of the energy Objectives.

The MEU considers that the energy Objectives, the Regulatory Pricing Principles and the Rate of Return Objective all lead to a conclusion that the allowed rate of return should reflect the lowest rate of return that is essential to allow the NSP to provide the services. To a large extent, this rate of return is one which the NSPs actually incur or one which is lower because the NSP has not reached the efficient frontier.

To develop an approach that results in a higher rate of return than the NSPs actually incur does not meet the requirement for the financing for the services provided to be efficient. The MEU considers that this must be an over-arching criterion. Worse, to apply an approach that depends heavily on assumptions and simplifications renders the results highly questionable.

1.2 The Rate of Return Framework

In the introduction to the Consultation Paper, the AER posits that the NEO, NGO and the overall rate of return objective will be achieved by the exercise of regulatory practices that (page 9):

• "recognise the desirability of consistent approaches to regulation across industry, so as to promote economic efficiency

- promote incentives to finance efficiently
- promote reasoned, predictable and transparent decision making
- ensure that the net present value of revenues is sufficient to cover service providers' efficient expenditures (the 'NPV=0' condition)
- promote flexibility and adaptability, to allow the regulator to make decisions in changing circumstances, and to take account of a wider range of assessment methods and information in estimating the rate of return
- improve the regulatory determination process to allow the regulator adequate time for decision making, to enhance consumer engagement, and to increase transparency and accountability"

The MEU considers that these are laudable goals and supports them because if they are all implemented to the full then there is a good likelihood that the long term interests of consumers will be maximised.

However, on closer examination of the Consultation Paper, the MEU has a major concern that the focus of the Consultation Paper has been more about the interests of the network service providers (NSPs) than for consumers. In particular, the paper consistently focuses on the fact that the regulatory regime is one to incentivise NSPs to seek better outcomes – that is, to finance their operations more efficiently. The MEU considers that there is too much of an emphasis on an external agency (the AER) seeking to incentivise the NSPs to finance efficiently, bearing in mind that this is what a competent management team should do automatically, as this would be in the interests of the NSP's shareholders. However, if the regulatory regime is to provide incentives to NSPs to finance efficiently, then the benefits of the increased efficiency should be returned to consumers at some point in time, but this requirement is not explicitly addressed at all in the Consultation Paper.

An NSP is recognised to be inefficient if the differential between the allowed weighted average cost of capital (WACC) and the NSP's actual WACC is negative as this will negatively impact consumers over the long term. This means that a slight bias is needed to minimise the potential for this to occur. Equally, it has also been recognised that the larger the positive differential between allowed and actual WACC, the greater the incentive to over-invest which is also not efficient. In fact, this is a more powerful incentive (to over invest). The approach the AER must take is to ensure that the WACC it allows errs in favour of a slight positive differential, but not one that is so excessive that it builds into the NSP an inefficiency factor that can run for a very long period of time (paralleling the live of the inefficient assets).

The purpose of incentive regulation (and the provision of incentives to NSPs) is that over time, the benefits of more efficient operations of the NSP will result in a benefit to consumers. Unless there is to be a more beneficial outcome for consumers (over the long term) for providing incentives to NSPs in the short term, the AER needs to be very careful in its approach. For example, in the list of "practices" detailed in the Consultation and Issues Papers, the AER lists the promotion of incentives to finance efficiently and throughout the Consultation Paper there are references to the need for incentives for NSPs to finance efficiently. Should the AER consider that NSPs are habitually inefficient in their funding practices, where then is the empirical evidence to justify this overwhelming concern? This concern (and the justification for the AER's approach must be backed up with solid evidence, Assumptions and conceptual reasoning is simply not good enough! In fact the empirical evidence there is, supports a view that rates of return achieved exceed the level identified by regulators as being appropriate¹.

Moreover, there is no reference anywhere in the Consultation Paper that the benefits of financing efficiently are to accrue to consumers. The only reference which might be an outcome that benefits consumers is that if the NSP does not finance its operations efficiently, then it might make poor investment decisions. The potential achievement by the NSP of the more efficient financing goes into the profits of the NSPs and to shareholders, and not to consumers.

The MEU asks a simple question. Why do consumers have to provide an incentive to the NSP to invest efficiently through ensuring the financing by the NSP is efficient and for the benefits to be captured by the NSPs and its shareholders (at the expense of consumers)?. If this was the only incentive for ensuring efficient investment by NSPs, then the MEU considers that the observation would have some merit, but this is not the case. The regulatory regime already has considerable incentives to invest efficiently – through the automatic roll in of capex, overt capex and opex incentive schemes, and a service standard incentive scheme. An additional incentive to ensure efficient investment simply adds to the overwhelming incentive schemes are focused on delivering a benefit to consumers, an incentive to finance efficiently will only benefit the NSP. There is an issue of asymmetry here.

What is required is that consumers should benefit through regulatory intervention from the lower financing costs that an NSP implements. This is what incentive regulation is intended to achieve. Currently, consumers are paying a hefty premium to NSPs which have benefited greatly from the AER awarding much higher costs for debt than the NSPs incur and the NSPs have been allowed to retain this benefit. As a result of this disparity we have seen an incentive to not efficiently invest. The AER's approach results in perverse outcomes!

In its response to the Issues paper, the MEU suggested that a revealed cost approach with an incentive arrangement could be applied to the provision of

¹ See for example the AER report: Victorian electricity distribution network service providers, Annual performance report 2010 May 2012 page 25

debt, in a similar fashion to that used for opex (the EBSS). In response to this, the AER comments (page 50)

"We note, however, that such an approach would reduce service providers' incentive to finance efficiently."

There is no explanation as to why a revealed cost approach would reduce the NSP's incentive to finance efficiently. There seems to be an assumption that NSPs would be inefficient in their funding approaches. But as pointed out earlier, the AER has not provided the evidence for this assumption. In fact, the implication of the statement is that such an approach would over-ride the corporate imperative to ensure costs are kept below revenue. The MEU finds this statement seriously lacking in credibility when considered in a business sense.

The MEU is aware that comments have been made that such an approach would result in the NSP seeing such an incentive as providing a cost recovery, similar to a cost of service model. If this is true, then opex and capex incentive schemes would have the same outcome. This is clearly not the case as the AER considers the incentive approach to opex (EBSS), capex (CESS) and service (STPIS) will deliver benefits to consumers. The AER must be consistent in its application of principles in guiding its work. Selectivity in approach is not acceptable to the MEU.

Whilst the MEU considers that the approach to setting the allowance for the rate of return should be incentivised, it also considers that there must be a method to ensure that the incentive provided by consumers to NSPs is rewarded by consumers benefiting from improved approaches to reducing the cost of capital needed by NSPs. The AER has so far only dealt with one side of the equation.

1.3 WACC and the Energy Objectives

The MEU is concerned that the AER has not provided a view as to what is meant by the term "efficient" in context of the assessment of the rate of return guideline.

In the text of the Consultation Paper the AER posits (page 51)

"Economists typically think of efficiency in three dimensions: productive, allocative and dynamic. In the context of debt financing:

- productive efficiency refers to least cost financing (i.e. the lowest required return on debt)
- allocative efficiency refers to the allowed return on debt reflecting the efficient cost of debt, and
- dynamic efficiency refers to the existence of appropriate investment incentives"

In the second reading speech by the Minister when introducing the new National Electricity Law in 2005 stated that²:

"The market objective is an economic concept and should be interpreted as such. For example, investment in and use of electricity services will be efficient when services are supplied **in the long run at least cost**, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities." emphasis added]

There is some subtle difference between what the Minister states is the focus of the Objective and the way the AER has interpreted the term "efficiency". From the consumer's viewpoint, an efficient network is one which delivers energy when they want it, where they want it, how they want and to pay the minimum cost.

1.4 What consumers want

The MEU has an increasing concern that there is a view that consumers are supposedly seeking stability and certainty of pricing and that these concepts are the prime drivers of what consumers want. Whilst these are goals that consumers would prefer to see, the MEU is firmly of the view that these are second (even third) order issues.

The primary concerns for consumers are that:

- They do not pay more than the efficient price for the service they receive.
- The guidelines do not provide the flexibility for the NSPs to "pick and choose" options that at any reset will provide the NSP with the opportunity to increase the revenue they might seek
- Theory is not the sole determinant of what the guidelines are based on and that empirical evidence clearly and accurately supports the outputs of the theory.

² Hansard, SA House of Assembly Wednesday 9 February 2005, page 1452

9

2. A criteria based approach

In its Issues Paper the AER posited that the principles it uses must provide a methodology that is:

- 1. Driven by economic principles
- 2. Supported by robust analysis
- 3. Implemented in accordance with best practice
- 4. Recognises the potential need for regulatory judgement, and
- 5. Supportive of broader regulatory aims

The MEU agreed with these principles subject to the outcome being demonstrably efficient. The MEU observed that it is simply unacceptable that a mechanistic approach which delivers obviously wrong outcomes should take precedence over getting the "right" answer.

The Consultation Paper has varied its approach from being based on principles to be one based on the following criteria (page 21):

"The allowed rate of return objective may be best met if the proposed rate of return methodologies are:

- where applicable, reflective of economic and finance principles and market information
 - estimation methods and financial models are consistent with wellaccepted economic and finance principles and informed by sound empirical analysis and robust data;
- fit for purpose;
 - use of estimation methods, financial models, market data and other evidence should be consistent with the original purpose for which it was compiled and have regard to the limitations of that purpose;
 - o promote simple over complex approaches where appropriate;
- implemented in accordance with good practice;
 - supported by robust, transparent and replicable analysis that is derived from available credible datasets;
- where models of the return on equity and debt are used these are;
 - based on quantitative modelling that is sufficiently robust as to not be unduly sensitive to errors in inputs estimation
 - based on quantitative modelling which avoids arbitrary filtering or adjustment of data which does not have a sound rationale;
- where market data and other information is used, this information is
 - $\circ \quad \text{credible and verifiable} \\$
 - o comparable and timely

- o clearly sourced
- sufficiently flexible as to allow changing market conditions and new information to be reflected in regulatory outcomes, as appropriate"

What the new criteria fail to include is an assessment of the outcome of the new regulatory approach so that the outcome is tested against reality – such that the allowed rate of return does not result in an allowance that is inconsistent with what is actually seen in the market.

In the Return on Equity forum held on 5 June 2013, the AER provided a forum for discussion on five different models for assessing the Return on Equity. One of the key aspects from that forum is that the output of a model must pass a sanity test. The discussion regarding the Dividend Growth Model (DGM) for assessing the return on equity reflected some modelling over time which implied that the DGM assessment made on a constant growth basis delivered an implied equity beta for the listed network firms where the equity beta would significantly exceed 1.0 for considerable periods. Intuitively, a regulated monopoly would be expected to have an equity beta below 1.0. Implicit in this sanity test is that the model would appear to deliver spurious outputs and therefore should be discarded. The MEU would expect that models that fail to pass the sanity test would not be used at all.

The AER comments that it will use financial models that

"...provide a consistent and coherent framework [which] ... will play a central role in the determination of the rate of return."

In principle, the MEU concurs with this sentiment but adds the rider that models are only acceptable if they deliver outcomes that reflect reality (ie pass the sanity test). The use of models regardless of the spurious outcomes they might deliver must not be permitted.

As an example of this, the AER consistently used a model for setting the debt risk premium which consistently resulted in the allowed return on debt significantly exceeding the cost of debt that NSPs were actually experiencing. Despite this obvious discrepancy, the AER has continued to use an obviously flawed model even though empirical evidence (actual NSP debt costs) showed the fallacy of the model.

When it is considered that between government ownership of some 80% of electricity assets and an APA Group which holds or controls a majority of gas transport assets, this concentration of ownership further distorts an ability to ensure that modelling will deliver an outcome that reflects the actuality of costs involved.

The second major concern the MEU has with regard to the criteria based approach detailed in the Consultation Paper, is with the "market data" the AER proposes to use. The AER considers market data to be (page 18):

- "data on prices, maturity and terms and conditions of government and nongovernment bonds, financial derivatives, currencies, and other financial instruments
- data on equity prices and ratios such as price earnings ratios and RAB multiples
- data on financial structures such as a gearing levels and credit ratings"

The listing of market data proposed to be used is unnecessary restrictive. For example, such an approach would exclude outcomes that are seen in the stock market. Referring again to the forum on 5 June 2013, the assessment of the DGM outputs for the listed network firms were compared to the market average (in this case the S&P 200). The market average is required to provide an output for the implied equity beta of 1.0 yet the listing of market data would appear to exclude the use of such market data.

The MEU points out that there is considerably more market data available that can be used constructively and this includes data from other firms that are just as capital intensive as NSPs but which are not necessarily regulated monopolies. In particular, these other firms can provide very useful data on the cost of debt (including the approaches they use to acquire debt at the lowest cost).

To exclude such other useful data that can bring a touch of reality (as distinct from modelling outputs) to the AER assessments is not in the interests of equity between NSPs and consumers, but certainly is not in the long term interests of consumers. Exclusion of such data is inconsistent with the AER's new stated criteria shown above.

3. Overall rate of return

In its response to the Issues Paper and at the various forums, the MEU reiterates its view that the rate of return should be built up using revealed costs, especially the cost of debt and the entity gearing.

Such an approach is reflective of incentive based regulation where each entity is incentivised to implement the most efficient costs for delivery of the service. Throughout the Consultation Paper, reference is made to incentivising the NSP to implement the most efficient form of financing yet nowhere is there a proposal that consumers should benefit from achievement of the most efficient financing approach. The benefits from the higher costs paid by consumers to incentivise efficient financing are captured entirely by the NSPs and its shareholders. At most, is expressed a view that the regulator will establish what it considers is an efficient financing approach and the NSP will be incentivised to "do better". Failure to do better or even not reach the financing allowance, could lead to a lowering of service which will not be in the interests of consumers.

The MEU considers that the current approach by the AER is probably incentivising better financing by the NSP for the benefit of the NSPs and not for the future benefit of consumers. This is a seriously significant failure by the AER and needs to be rectified.

3.1 The use of models

Throughout the Consultation Paper, the AER persists in attempting to establish a model (or models) that will provide it with a mechanistic approach to calculating a "forward looking" rate of return. It also posits a view that this forward looking rate if return can be developed from a number of unique point estimates for the elements comprising the final rate of return calculation.

There are two key aspects of the proposed approach that raise significant concerns.

1 The approach to using a model(s) that has not been tested raises concern. Whatever model(s) the AER proposes to use should be tested to ensure that the outputs of the model(s) reflect actual outcomes. For example, the AER should use inputs from the past and compare the model outcomes with whatever actually occurred. As energy regulation in Australia has now been in place for nearly 20 years, the AER can access a database of what actually has occurred in terms of actual rates of return in comparison to allowed rates of return. The AER can use historic data and the models they develop to test the model using inputs that applied in the past to test the efficacy of the model in generating an output rate of return. This output can be compared to actual outcomes. The MEU recognises that there are other aspects that affect the actual

outcomes, but it is totally unacceptable to rely on a model that has not been tested to produce an output that is expected to have some validity.

The lack of empirical evidence is a serious deficiency in this AER work. This was pointed out by consumer stakeholders in the AER workshop on risk and the rate of return on 18 June. Detailed discussion of risks and risk mitigation factors as they apply to the regulated NSPs was absent in the Frontier Economics Paper and there was evidence provided on the profitability of the NSPs under the past 10 years to provide a guide as to the reality of the risks faced by NSPs. What drove the discussions was conceptual and generalised. In other words, the MEU considers that more rigorous work needs to be undertaken.

2 The approach to setting point estimates for each input results in an increasingly conservative outcome. It is recognised that the AER will assess each input in detail but as each element will have a range of outputs, the AER has historically applied a degree of conservatism when selecting its point estimate. The AER then uses each of these conservative point estimates to generate its final output. This means that the conservatism of each point estimate accumulates into a large level of conservatism. To avoid this accumulation of conservatism, it would be preferable to develop a range of values for each input and then to identify a range of outputs from the models. The final range of outputs can then be benchmarked against market based outcomes to develop a point estimate of the RoR. This means that there is only one defined allowance used for conservatism.

3.2 A "reasonableness" test

The MEU considers that applying just a mechanistic approach to setting the rate of return is liable to introduce outputs that are patently wrong when compared to "real world" outcomes. Whatever the outputs of the various models used reveal, these outputs must be compared to outcomes seen in the wider market environment.

In its response to the Issues Paper, the MEU commented:

"It would be bizarre if, as has frequently occurred with previous regulatory decisions, that regulated entities receive higher rates of return than firms operating in a more risky environment. Benchmarking against what is actually occurring in the wider market must also be an assessment as to whether the bottom up approach has delivered outcomes that are in stark contrast to what other firms are achieving despite operating in competitive environments."

At the Return on Equity forum on 4 June, the AER tabled the outworking of the dividend growth model (constant growth) for the five listed network firms and the S&P 200.





What this shows is that this model has identified that the cost of equity calculated for the listed regulated monopoly network firms exceeds the return on equity for the S&P 200 firms. Intuitively, it would be expected that the return on equity for regulated monopolies would be lower (due to their lower risk profile) than for the average of firms operating in a competitive market. This testing for reality must be an integral element of the outputs of any model that the AER uses to develop a rate of return.

To take this concept further, there should be a longitudinal assessment of what has been allowed measured against what actually occurred. A review of decisions by the AER and the ESCV for networks owned by SP Ausnet indicates that the allowed regulatory rates of return over the covering the bulk of the last decade were generally less than 10%, yet the cost of equity calculated from the constant growth DGM significantly exceeded the allowance.

Secondly, The AER should track over each regulatory period (and report on it) whether the rates of return, on debt and on equity for the regulated firm match the rates used by the regulator. The AER already does this in relation to opex and to a lesser extent in relation to capex. The rate of return allowed provides another element to the "bucket of money" assessed as being appropriate payment for the services provided. If there is a significant variation between the allowed rates to those actually achieved, then this provides the AER with evidence that change to its bottom up calculation is needed.

This longitudinal assessment also allows the AER to identify if the regulated firm has implemented more efficient ways of financing its operations. If it has, then because the regulatory regime is one of providing incentives so that over the long term, consumers will enjoy the benefits of the improvements in efficiency, these more efficient financing approaches should be integrated into the future rates of returns allowed. The following five figures record the actual rates of return³ earned by the Victorian electricity distribution networks over the past decade compared to the allowed rate of return provided by the regulator.



Figure 2.4

16

14

12

10

8

4

2

0

Av 2002

1997-

2001

2003 2004

E Forecast

2005 2008

2007 2008

Actual

2009 2010

%

SP AusNet pre-tax return on

distribution assets

Figure 2.3 Powercor pre-tax return on distribution assets



Figure 2.5 United Energy pre-tax return on distribution assets



This highlights that, for every Victorian electricity NSP, for every year since deregulation, the NSPs achieved a rate of return considerably more than the allowed rate of return. The more obvious reasons for this are many: higher revenues than forecast, lower opex than forecast, lower capex than forecast

³ AER: Victorian electricity distribution network service providers, Annual performance report 2010 May 2012 page 25

and higher than forecast customer contributions. At the same time, service performance was not significantly impacted. What is not identified, in the absence of these other contributors of improved RoR, would the RoR calculated by the regulator have been higher or lower than that calculated by the regulator or whether the RoE exceeded the market average adjusted for the equity beta.

The value of such longitudinal measures provides evidence as to whether the outcomes of the regulatory approach used has been negatively impacted by the approach used in setting the RoR allowances. Further, a longitudinal review of the actual outcomes of the RoR of the NSPs can be benchmarked with the average of the market as a whole (eg against the S&P 200) to assess whether the rate of return gained by the NSPs out performed the market as a whole. Intuitively, it would be expected that NSPs as a group would have lower rates of return than the market due to their lower risk profile⁴

What this assessment also provides is evidence that the setting of the allowed rate of return needs to be considered as a part only of the entire regulatory process. This point was clearly made by the Expert Panel appointed by SCER to review the limited merits appeal process. Their view was made succinctly – the building block approach merely establishes a "bucket of money"⁵ which the NSP has the ability to use in any way it wishes in order to provide the service contracted through the regulatory bargain.

An issue raised at the forums has been that the concepts of "certainty" and "consistency" need to be a core element of the RoR guideline. The MEU considers that these must be placed well behind the concept that the outcome must be demonstrably efficient, reflect reality and pass a sanity test.

The Consultation Paper posits the importance of a "reasonableness" check on the overall rate of return. The Paper proposes to use (page 26):

- RAB acquisition and trading multiples
- comparison with brokers' or takeover valuation report discount rates
- comparison with other regulators' rates of return
- comparison of return on equity and return on debt
- financeability and credit metrics
- other possible sources of information

⁵ The Expert Panel made this comment to the MEU during a meeting the MEU Had with it. However the sentiment implied by the comment is made in its report where it recommends that all aspects of a decision need to be examined holistically due to the high degree of interdependence there is between each element of the building block approach to setting regulatory revenues.

⁴ It must be also recognised that risk needs also to reflect the ability of a firm to identify other means to manage its risk. This is discussed in section 4 below, but needs to reflect that if, for example, an NSP is able to consistently under-run its opex allowance due to gaming the regulator, then this is a benefit that has to be offset against the other risks faced by the NSP

The MEU considers that all of the above are appropriate, with some less appropriate than others (eg why do decisions of other regulators matter so much).

However, what is apparently missing is a comparison to what is occurring in other sectors of the market. The AER quite rightly compared the return on equity for the listed energy network firms against the market average (see the above comparison of network firms against the S&P 200 in the DGM analysis above) yet has failed to include such basic comparisons as part of its proposed "reasonableness" checks.

The MEU considers that the AER must include in such testing for comparisons to the wider market.

3.3 Term of the WACC

As a principle, if the approach to setting the return on equity is to use a forward looking risk free rate and a backward looking market risk premium and equity beta, the MEU agrees that the term of used for the return on equity should reflect the regulatory period⁶. In its response to the Issues Paper, the MEU suggested that this approach has merit and therefore agrees with arguments made by Professor Lally on this point.

Also in its response to the Issues Paper, the MEU proposed that investment is not made on the basis of short term assessments of a return on equity but more with a longer term focus that does not reflect the short term vagaries of bond markets. For example, a firm intending to invest in a new facility does not look merely at the current risk free rate, add a market risk premium and use this as its expected return. In fact, the investor looks at what will happen over the longer term and calculate the expected cash flow to generate an internal rate of return (IRR) and compare this to a hurdle rate that that has been developed over many years as one which demonstrably delivers an acceptable return over the long term. Such an approach is also forward looking but based on long term experience.

In relation to the return on debt, the AER considers that the AEMC has determined there are only three options for assessing the tem of the return on debt:

- That the debt is acquired just before the start of the regulatory period and expires at the end of the regulatory period
- That the debt is acquired on a rolling basis so that tranches of debt expire each year of the regulatory period

⁶ This has a degree of internal consistency but still reflects a basic inconsistency that results from using a mix of both forward looking and backward looking inputs.

• A combination of both

The MEU agrees that these are options provided by the AEMC as part of the new rules, but the MEU also points out that the words in the rules is that the

"...methodology adopted to estimate the return on debt may, without limitation, be designed to result in the return on debt reflecting..."

these options. The operative words "may without limitation" highlight that these three options are not mandatory or even supposed to be constraining. The MEU is concerned that the AER seems to consider these three options are mandatory.

However, discussion by the NSPs highlights their desire to have the option as to which approach they consider best serves their needs. This raises within the MEU a deep concern that the option used must be fixed by each NSP and that no changes are subsequently allowed. If this is not done, then each NSP will use the approach which best serves their interests at the time of each reset, providing a mechanism for "gaming". Setting a single approach deemed to most closely reflect the actual way an NSP raises its debt must be set by the AER, although an alternative might be allowed given sufficient reason to change but only once so that gaming is prevented.

Regardless of the approach used, the approach to setting the debt should reflect either:

- The term of the regulatory period because this reflects the approach implicit in the "on the Day" approach which provides a cost of debt just for the regulatory period, or
- A term which reflects the development of a portfolio of debt seen widely in the market⁷, as this best matches the way a portfolio of debt is developed by a firm to minimise its risk.

Either of these approaches has merit, and based on the WA ERA approach, both reflect terms similar to a five year regulatory period.

3.4 Questions asked

Question 3.1

Do stakeholders agree with our proposition that we should continue to determine the rate of return by ultimately selecting point estimates (possibly from within ranges) of the return on equity, the return on debt, and gearing?

⁷ For example, WA ERA assessed the average term of a portfolio of debt seen in the wider market and used this term as the basis of its cost of debt allowance for Western Power in its 2012 decision.

No. See comments above. The MEU considers that setting the five point estimates (risk free rate, market risk premium, equity beta, debt risk premium and gearing) will lead to an increased level of conservatism in the final calculation. The MEU considers that the final output should be a range which is then benchmarked to ensure that the "correct" outcome is set rather than following a mechanistic approach that is implied by using various point estimates in the final calculation.

Question 3.2

What is the appropriate term for the return on equity? Do stakeholders support Lally's recommendation based on the present value principle that the appropriate term should be consistent with the regulatory period?

Subject to the comments in 3.2 above, the MEU agrees with Lally's recommendation

Question 3.3

What is the appropriate term for the return on debt? Do stakeholders agree with the view that a specific term is not required, if we apply an approach that is similar to the ERA's 'bond-yield approach'? Is there a case for the same term for the return on equity and return on debt?

See comments above. The MEU considers that either the regulatory period should set the term of debt (especially where the "on the day" assessment of debt is used) or a term which reflects an average portfolio of debt seen in the wider market (in the case where the "trailing average portfolio" is used).

Question 3.4

For parameter estimates, should we adopt point estimates, ranges, or point estimates from within a range?

See comments above. The MEU is concerned that using a series of point estimates will result in an accumulation of conservative allowances in the final point value. Using a range of inputs into the final calculation allows the regulator to make one allowance for conservatism and to use market data and other "reasonableness" checks to influence the final point estimate identified from the range calculated.

Question 3.5

At what stage (during a determination or the guidelines process) should point estimates or ranges of the return on equity, return on debt and parameter estimates, be established?

The MEU considers that the framework for the development of the RoR should be clearly identified in the guidelines. The basis for developing, calculating and using the outcomes from the different models and checks should also be in the guidelines. Parameters which have longer term validities (eg market risk premium, equity beta, debt portfolio terms) could be set at each three year WACC review at the same time as the guideline review.

The parameters with short term validities should be set at each reset as should the analyses and comparisons of outcomes with benchmark information

4. Benchmark firm and risk

4.1 Benchmark entity

The Consultation Paper persists in attempting to identify what is the "benchmark entity or entities". There is no such entity. All firms are different and approach structure, gearing and risks differently and each considers that its approach is the most efficient for its needs – indeed the firm's directors are charged with this responsibility to the firm's shareholders under the Corporations Law.

For the AER to try and develop what it considers is the benchmark entity (or entities) is a fraught exercise and liable to be wrong. The AER has also noted elsewhere that it will take a conservative view as there is an asymmetric risk to consumers for under-providing revenue than over providing. This means that the AER will establish a structure which is conservative and have higher costs than might be needed to provide the service

A firm will use debt in preference to equity because this provides the best return for shareholders. As the MEU pointed out in its response to the Issues Paper, lenders will determine the extent and cost of debt they will provide. This sets the gearing of the entity.

Because of this the MEU has considered that a revealed cost approach, incentivised to do better, will probably serve consumers better than the AER attempting to "prove" that their benchmark is better than what the NSPs have developed for their own unique needs.

The MEU has doubts that the AER can more exactly identify a level of gearing for an NSP which is the most efficient than can the directors of that firm or can the lenders to the firm.

4.2 Risk management

As seen in section 3 above, a regulated NSP has a number of opportunities to manage its risks, perhaps more so than firms operating in a competitive market. One of the more obvious approaches an NSP has is to "game" the regulator into allowing it more than it really needs (eg increasing its opex allowance).

Additionally, the regulatory environment is one where the regulator does take a conservative view in making allowances on the premise that a small over-run in cost is preferable to a small under-run in performance, especially when the "lights go out". Implicit in the conservative approach taken, is that the NSP will be granted higher allowances than it might need to provide the service.

These two observations lead immediately to the thought that the not only has an NSP a lower risk profile than a firm in a competitive environment, but it also has the potential to increase its rate of return above what the regulator considers si an appropriate rate of return purely through the regulatory processes.

The initial view that has been propounded by the NSPs is that any assessment of risk should be based on a "pure play" network – implicit in this is that any assessment should be made "without parent ownership". In practice, this is meaningless. Except for government owned networks, there is no pure play network operation in the country. The reason for this is simple – acquisition of a number of networks provides the parent with the ability to manage its risk through ownership of a portfolio of networks and, intuitively, through combining the operations of a number of networks, costs to the parent should be reduced.

In the case of government owned networks, whilst they might be "pure play" ownership by a government provides a number of other benefits to the network – foremost of which is a lower cost of debt and the ability of the owner to receive the tax payable on profits to be remitted for the operations of the network.

The MEU therefore considers that risk has to be assessed on the realities of the network services market and not on a flawed assumption that networks are privately owned "pure play". The outcome of such an assumption will lead to an outcome that contradicts the national energy objectives that the long term interests of consumers is the core basis for regulation.

In responses to the Issues Paper, NSPs averred that size (in terms of RAB) was critical to practices related to acquiring debt. In practice, there is no such issue as small networks are part of a parental fleet of assets where the benefits of a large parent are supposed to mitigate the risks inherent in small pure play networks.

The MEU Notes that the AER has commissioned a report to assess the risks and rates of return faced by NSPs. Once this report is released, the MEU will assess the views expressed therein. The MEU hopes that this report will identify the degree of risk that is faced by an NSP compared to a firm facing competition. For example, the listing in section 4.4.1 identifies that NSPs are virtually insulated from competition yet fails to emphasis that the volume risk faced by an NSP is considerably less than that faced by a firm in competition where a new entrant or import could massively impact its volume risk whereas the volume risk faced by an NSP on a price cap is relatively modest

The AER listing of the risks faced by NSPs (section 4.4.1) does not identify where a risk faced by a regulated NSP is greater than those faced by firms operating in a competitive environment. In particular, the listing of risks does not recognise the value of a predetermined cash flow when explaining the risk. This especially is important when considering the risk faced in relation to financing. The certainty of cash flow has a massive and supportive impact on the level of risk (and cost) of debt incurred by an NSP.

The MEU notes that the AER is anticipating that the report from its consultant will assist it in assessing whether a simple or complex approach will be needed

to identifying the "benchmark entity" or whether there will be multiple "benchmark entities" and what will differentiate between them.

In this regard, the MEU points out that what might be an efficient financing approach for one entity might not be so for another, yet both might still deliver similar outcomes in terms on impacts on consumers.

4.3 The Frontier/McKenzie/Partington advice on risk

In addition to the Consultation Paper, the AER provided two consultant reports addressing the risks faced by NSPs (Frontier Economics) and a critique of the models available to the AER for assessing risk in terms of the rates of return, especially the rates of return on equity, (McKenzie Partington). These papers were discussed at a forum on 18 June.

4.4.1 McKenzie/Partington (MP) report

The report provides details on the various models available to the AER which provide a sound basis for assessing their use and validity in relation to forecasting an appropriate rate of return for regulated networks. In developing their views on the applicability of the various models available for forecasting future rates of return, the MP report makes some interesting observations:

• On page 7 the report notes:

"Whatever the financing choices of the firm, the key point of the present value principle is that it is the *capital market* discount rate for assets of the relevant risk and maturity that should be used in valuing investments. Even if the firm faced capital rationing and faced limited access to capital markets, as long as its investors have good access to capital markets, it is the capital market that determines the required return".

The MEU draws the conclusion for this observation that when assessing the financing needs of a network, the regulator must use the financing approach of the network's parent in order to reflect the actuality of the capital market in their decision making processes

• On page 10 the report notes:

"However, for regulated businesses with low default risk the overstatement [of default risk] is unlikely to be substantial."

The MEU notes the preference of the AER to use corporate bonds as the basis for setting the cost of debt. In this regard, the cost of the corporate bond would already include for this risk, and if the firm issuing the bond was an entity operating in a competitive market, that risk would be seen as higher than for a regulated firm with a "guaranteed" cash flow. The risk of "double counting" is therefore high and must be avoided.

• On page 13, the report notes:

"In the case of utilities cash and liquid asset balances tend to be small (smaller than in many other industries). Less surplus cash means smaller agency costs and risks."

The MEU comments that such lower agency costs and risks would result in lower costs and risks for NSPs and should be reflected in the AER allowances.

It is clear from the MP report that all the models for valuing capital have their shortcomings, so the MEU considers that the AER has to identify the model with the fewest shortcomings as the model it intends to use. The MEU does not consider that a suite of models should be used (thereby deriving a composite outcome) nor should there be a range of models for an NSP to select – this would result in the NSPs selecting the model which provides the best outcome for the NSP and therefore disadvantaging consumers.

From the commentary provided by MP, it is obvious that the model that meets this criterion (of having the fewest shortcomings) best is the Sharpe Lintner CAPM. This view is reinforced by the fact that it is the most widely used as a regulatory tool for developing rates of return. In particular, it is the tool used by regulators in Australia over a very long period of time and consumers are familiar with it. Moreover, MEU member companies apply this model in their financing arrangements and are familiar with its application.

Despite the view expressed in the MP report implying that the S-L CAPM has the fewest shortcomings of all the models investigated, during the forum on 18 there was a comment made that as all the models had shortcomings then perhaps a portfolio of models might be appropriate. The MEU is unsure as to whether this meant that a selection of models be made available for the NSP to select from or that an average (weighted or not) of the outputs of all the models should be used to set a regulatory value for rate of return. Either approach would be inappropriate. As noted above, "picking and choosing" of the model preferred by an NSP at a reset is not in the interests of consumers and the MEU considers that a better answer will not result from averaging a number of outputs from flawed models. Such an approach would not reflect the fact that some models are more flawed than others and attempting to assign weights to the outputs is equally disingenuous.

The MEU is firmly of the view that the least flawed model should be used (and the S-L CAPM would appear to fit this requirement) and the outputs of the model should be tested against what was actually seen and this "real life" experience used to adjust the output if there is seen to be a need. However, based on the outcomes actually seen for NSPs (see above), it might appear that the S-L CAPM has not provided outputs that are detrimental to NSPs and if anything disadvantage consumers.

The report notes that the Dividend Growth Model (DGM) has been used considerably in the US but suffers from significant shortcomings, especially in terms of having to make explicit adjustments to reflect risk and assuming that these are incorporated in the actual dividends recorded. A major concern of the MEU is the observation (page 39) that:

"The DGM approach gives rise to models that are readily implemented, however, the resulting estimate of the cost of equity will be sensitive to the choice of model and to assumptions about the growth rate in dividends."

These qualifications detract for the desire, espoused by all stakeholders, for consistency in approach. The MEU does not consider that this model sufficiently meets the required level of certainty and consistency implicit in the requirements of the rules.

To support this view espoused in the MP report, the MEU refers to section 3.2 above where the outputs from DGM analysis were charted by the AER for the listed energy network firms. The MEU notes that although the outcomes for the firms indicated that a beta of >1.0 might actually apply to them (contrary to an intuitive assessment where beta would be expected to be < 1.0) there are other aspects that influence such a view.

An example of the distortions that can be incorporated into the DGM is the case of Envestra, one of the listed firms used in the AER analysis of the DGM. In its report to the ASX on 13 August 2008⁸, it was identified that the ratings agency (Standard and Poors) had down graded the credit rating of Envestra because of its increasingly high gearing combined with its dividend payment approach⁹. What is important to note is that its financial outcomes were not matched to its dividend policy (a management decision), resulting, in the view of S&P, of a higher than warranted dividend payment. This implies that the DGM approach can be impacted (at least in the short term) by management decisions which would then flow into the DGM, distorting the DGM outputs. That such an outcome can occur provides doubt as to its use for regulatory forecasting as outputs would be influenced by management decision making rather than the underlying fundamentals of the firm.

⁸ Available at

⁹ The lower than expected cashflow from the Victorian gas DB owned by Envestra was also noted as a concern

The other model suggested regularly by the NSPs as one the AER should have regard for, is the Fama-French three factor model (FF3FM). This model uses empirical data to quantify its three factors, but the MP observation that the three factors selected have no theoretical basis (despite apparently having legitimacy on an empirical basis) raising considerable concern. The FF3FM seems to work across a widely diverse portfolio of investments yet there appears to be no certainty that it will provide an accurate forecast of what is an appropriate return for a specific investment type (ie for a regulated NSP). The view provided the US Federal Reserve about their concerns with the multi-factor models (including the FF3FM) are telling and therefore the MEU considers that its use in regulatory resets is severely compromised.

What is not addressed in the MP report, is any assessment of actual returns achieved by regulated firms compared to the returns allowed by the regulator (which were based on the S-L CAPM) and whether these are consistent with what has been achieved in the market overall. Such an assessment would reveal whether the previous applications of the CAPM were conservative or resulted in appropriate outcomes for NSPs. In this regard, the MEU noted that the Victorian electricity NSPs (see section 3.2) all achieved greater rates of return than were allowed by the regulator. Similarly, the AER reports that the Victorian gas distribution firms all outperformed their allowed rates of return in 2011 as the following table¹⁰ shows:

Distributor	Forecast pre-tax return on assets	Actual pre-tax return on assets	Variance
Envestra	7.0%	8.2%	1.2%
Multinet	7.9%	8.9%	1.0%
SP AusNet	7.8%	9.2%	1.5%

Table 1.2.1 R	eturn on	assets	2011
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Source: ESCV 2008-12 GAAR and revisions to GAAR and DNSP annual regulatory accounting reports

Table 1.3.1 shows that for 2011, the DNSPs have been able to achieve a higher than forecast return on assets. In particular:

It is therefore obvious that historically, the S-L CAPM has provided sufficient allowance for the risks faced by the NSPs and which allowed them to outperform the rate of return on assets calculated by the S-L CAPM by a considerable margin.

¹⁰ Table 1.2.1 page 14 AER report March 2013: Victorian Gas Distribution Business Comparative Performance Report 2009–2011

This empirical assessment gives confidence that the approaches used for setting rates of return in the past using the S-L CAPM have more than adequately met the needs of NSPs.

4.4.2 Frontier Economics report

The Frontier Report provides a detailed assessment, based on conceptual analysis, of the risks that are faced by regulated NSPs. However, the MEU is intrigued by what the AER can do with such a report.

Frontier provides the following table of risks faced on page 8

Business risks	Financial risks	
Demand risk	Refinancing risk	
Input price risk	Interest rate reset risk	
Cost volume risk	Illiquidity risk	
Supplier risk	Default risk	
Inflation risk	Financial counterparty risk	
Competition risk		
Stranding risk		
Political / regulatory risk		
Other business risks		

Table 1: Summary of potential risk factors a regulated network may be exposed to

Source: Frontier Economics

Other than regulatory risk, all firms (whether regulated or in competition) face these risks, with those in a competitive environment facing the risk to the same degree or greater. It is therefore essential that Frontier identifies where the risk faced by an NSP is different to that faced by a firm facing competition, and some attempt made to quantify that risk differential.

Within the report there are a number of aspects that the MEU finds intriguing or even misleading:

 On page 2, the report notes that ownership is not a determinant of the cost of financing and the report notes that project financing is carried out based on the fundamentals of the project. The MEU does not disagree with this concept, but does point out that the financing of NSP activities is not carried out on a project basis but the funds raised by an NSP are raised largely to refinance sunk capital and to finance new network investments, with little (if any) raised for specific new projects. Therefore, financing reflects the firm's fundamentals rather than the fundamentals of a project. The MEU considers that for the bulk of financing, the network owner (including parent/owners of networks) sets the basis for the cost of finance. Therefore the conclusion drawn by Frontier that financing is independent of ownership, is not true in the case of financing NSPs. This has been demonstrated empirically from NSP financial reports where the cost of financing varies across the NSPs, particularly between privately owned and government owned NSPs

- On page 28, the report highlights that there are mixed results when analysing size of firm impacts in Australia. As the FF3FM uses size as one of its differentiating factors, this increases the doubt as to the effectiveness of the FF3FM in forecasting future rates of return for regulatory purposes, supporting the views of MP on the use of this model.
- On page 39, the report highlights that, unless there is strict ring-fencing of the regulated entity from its parent, then the financing of the parent will be reflected in the subsidiary. This is consistent with the view of McKenzie/Partington reached in their report. This appears to contradict the view Frontier puts that ownership is not a determinant of financing costs.
- On page 70, the report provides analysis that shows that the market capitalisation of NSPs implies that NSPs (in their own right) are mid cap entities, biased towards the high end of the scale. When classified by ownership, they would have to be identified as large cap entities. Arguments by NSPs that they need to have flexibility in approaches to accommodate small networks, become irrelevant.

What the report fails to do is to, is identify clearly that many of the risks faced can be managed (thereby reducing the level of risk) or have considerable "upside" inherent in the risk. To focus just on risk without assessing the potential for benefiting from taking the risk results in a one-sided view of the risk. As has been seen from the AER reports on Victorian NSPs, despite there being some risks (eg volume risk where volumes of the energy transported were lower than forecast) the NSPs have still been able to exceed the allowed rate of return.

The second criticism the MEU has of the Frontier report is that it fails entirely to put the risks identified into context. Almost all of the risks identified (other than regulatory risk) are common to every firm operating in the market. What the Frontier report does not do is to identify the comparative risk faced by the NSP compared to a firm operating with competition. Without such a comparative analysis, the import of the Frontier report could be assumed to show that the NSPs face massive risks and need to be compensated for these. A comparative analysis would show that firms in competition face in aggregate terms much higher risk that do energy networks. This is particularly important as the market risk premium used in the S-L CAPM is derived from data which includes all the risks faced by firms listed by the ASX¹¹.

The report does highlight some the approaches regulation provides to mitigate the risks faced (eg pass throughs, reopeners, contingency projects, etc) but fails to note that there are other aspects where the NSP is well placed to manage the risks by passing the risk and/or cost to consumers. Such other approaches are:

- Using the rules to maximise revenue. It is recognised that the rules are written to provide a bias towards NSPs; in many cases the rules allow the NSP to select an approach to cost setting which they do to maximise revenue. Historically, the rules have been unbalanced, poorly written and sometimes with unclear intent. These have been used to great effect by NSPs to maximise and (often unfairly) revenue.
- Noting the investigatory powers of the regulator are heavily proscribed, the NSPs can use this asymmetry of information to bias outcomes in their favour
- Using the regulatory regime (proposed/respond) requiring the regulator to accept a cost input which is within the range of acceptability. This means that the NSP can consistently "game" the regulator by making excessive claims in order to set a higher allowance than might be efficient.
- To manage a lower than expected volume, an NSP can defer capex to reflect the changed circumstance and whilst doing so garner an improved financial result with no risk
- Automatic roll in of actual capex eliminates the risk of inefficient investment
- Continued retention in the regulatory asset base of stranded and redundant assets provides a considerable reduction in risk compared to that faced by firms in competition. Frontier notes that the high penetration of PV panels at the residential level increases the risk on TNSPs yet because of the regulatory approach, sunk assets are included in the asset base regardless as to whether they are stranded or redundant. Furthermore, these assets (along with all other assets) are indexed at each regulatory reset to retain their real value.
- The return of capital in full is a benefit seldom (if ever) seen by firms in competition¹²

¹¹ It needs to be remembered that firms which failed exclude themselves from the market and therefore the market data only includes firms which did not fail. ,Therefore the market risk premium overstates the reward from managing risks faced by all firms in the market. This aspect from using market data is often overlooked.

¹² The frequency that firms in competition have to "write down" asset values because of changed circumstance is a reflection of an inability to fully recover capital previously invested

- Using the regulatory appeals process cleverly (the track record of appeals is heavily in favour of NSPs against AER decisions) with the resultant pass through of costs to consumers. Rating agencies have identified this as a significant upside benefit when assessing regulatory decisions.
- The certainty of the cash flow seen by NSPs (compared to firms in competition) provides a significant benefit which is not identified as countervailing to the risks identified

An emerging trend (and likely to get greater) is that NSPs are able to use the assets paid for by consumers to generate unregulated revenue. Up to now the NSPs have been able to retain the full value of such unregulated revenue and, based on the current AER review of Shared Assets, NSPs will continue to benefit from such additional revenue using assets that consumers have paid full value for the use¹³. This provides a countervailing upside against the risks faced by NSPs.

The empirical evidence from the rate of return for the Victorian NSPs shows that the risks faced by NSPs are readily managed and overcome to the extent that the NSPs all showed better than allowed rates of return which were set on the NSP firm's fundamentals (see section 3.2 and 4.4.1). On this basis more comparative work is required just to see how regulated firms have performed in the past against the allowances provided by regulators. This will give greater credibility (or not) to the WACC approach used by regulators.

The approach used by Frontier in its report provides the AER with little usable information on which to assess the comparative risks faced by NSPs. The most important aspect that the AER needs to know is how to recognise the risks faced by NSPs compared to the market average, recognising the market average (market risk premium) is the benchmark used by the AER to set the return on equity. The absence of any comparative data to firms in competition and quantification of the risks identified (and allowing an offset of the benefits of the regulatory regime provides) leaves the AER in no better a position than it was without the report.

The MEU considers that the report needs to be expanded to reflect risks on a comparative basis (between regulated and competitive) and with some degree of quantification for each of the risks identified.

 ¹³ The MEU points to its response to the Shared Assets Issues paper. See
 <u>http://www.aer.gov.au/sites/default/files/MEU%20-</u>
 %20Shared%20asset%20guideline%20submission%20-%20May%202013.pdf

4.4 Questions asked

Question 4.1

Set out the risk factors that you consider should be compensated through the rate of return. How can we assess whether different companies are exposed to materially different degrees of these risks?

The listing provided by the AER does cover the risks that an NSP will likely face. However, what is needed is an assessment as to the relativity between the degree of risk faced by an NSP compared to the risk faced by a firm in the competitive environment.

The market provides a measure for the average risk faced by all firms but what is needed is a measure to identify the extent to which the NSP risks vary from this market average. Equity beta has been used in the past for this as a quantitative measure and is a good starting point.

Question 4.2

Do different return on equity models account for systematic risk differently, or do they also account for non-systematic risk? If the latter, is it appropriate for the AER to set allowances that remunerate risks that could be diversified away from?

As discussed at the RoE forum on 4 June, and in more detail above, the MEU is of the view that any model has to be tested to see if historic inputs would have replicated actual outcomes. Further, a model needs to show that the outcomes for an NSP are reasonable compared to the average market outcomes. If the model fails either of these basic tests, then it should be discarded.

If a model delivers outcomes that reflect the market, then the degree to which a model delivers consistency of outcomes comparable to the market, then greater weight can be given to its use in its use for forecasting.

For example, the outcomes for the dividend growth model assuming constant growth tabled at the forum would not meet the reasonableness criterion as it implies an equity beta greater than 1.0 which is intuitively wrong.

The AER needs to carry out similar tests for the other models to verify their usefulness. The MEU considers that empirical assessments are more likely to define the usefulness of the various models rather than theoretical analysis.

Question 4.3

Do you agree that the AER should seek to utilise the smallest number of benchmarks that capture materially different degrees of risk? How do we utilise different benchmarks while retaining the objectives of incentive-based regulation? Every firm operates differently to another – even those which are regulated monopolies¹⁴. The AER therefore cannot determine what is the most financially efficient entity and this is why the MEU considers the AER must make reference to the financing approaches used by the firm being assessed (ie a "revealed cost" approach).

The AER then makes reference to the objectives of incentive based regulation, but what the AER appears to be contemplating through its approach is that the incentive is on the NSP to be efficient (which it should be anyway). As noted in section 1.2 above, the purpose of an incentive regulatory regime is to drive the NSP to the efficient frontier so that consumers can benefit from this achievement. The AER approach does not contemplate any efficiency sharing from the NSP being more financially efficient, so why is the AER considering different benchmarks if the NSPs are the only beneficiaries?

¹⁴ For example, Envestra has a much higher gearing than SP Ausnet yet no one can determine with certainty whether Envestra gearing is more efficient than that of SP Ausnet.

5. Return on equity

The Consultation paper provides a view that the NSP see that the return on equity (RoE) would reflect the outcome of a number of models used to generate this output. They make no reference to what the market outcomes are to test the relevance of the different models.

In contrast the Consultation Paper highlights that consumers see the importance of the RoE for NSPs being related to the wider market.

Of concern is that the NSP's proposed approach would raise the potential for arguments based on theoretical grounds when the outcomes are patently false. This is what has occurred in relation to setting the debt risk premium and the Competition Tribunal has been complicit in accepting theoretical arguments even when the outcomes are empirically shown to be wrong.

Because of this the MEU considers that empirical data (ie outcomes seen in the wider market) must take precedence over theoretical considerations. As noted in section 4, a model that does not deliver an output that is consistent with the outcomes seen in the wider market should not be given any credence.

The AER has posited four basic approaches to setting the RoE:

1. A single use model with no adjustments

The benefit of a single model is that there is consistency, and no need to weight the outputs. It therefore avoids the inevitable arguments as to what should the weights be if multiple models are used but suffers from the use of a blindly mechanistic approach.

The MEU has major concerns with this approach as it replicates the flawed approach used in setting debt risk premium. It has the major drawback that there is no assessment as to whether the output reflects what is seen in the wider market.

On this simple analysis, the MEU does not consider that this is a feasible option and should not be used.

2. A primary model with checks and a qualitative adjustment

The benefit of a single model is that there is consistency in the approach, and no need to weight the outputs. It therefore avoids the inevitable arguments as to what should the weights be if multiple models are used.

If the model has been tested and when using historic inputs consistently provides outputs comparable to the market outcomes, then it has demonstrated an ability to provide the basis for an approach which will deliver appropriate outcomes. Providing the ability to vary to output based on current market evidence provides an outcome that can be seen and adjusted in context with the wider market evidence.

On this simple analysis, the MEU sees there is considerable merit in this approach.

3. Several models with predetermined weightings

This approach should only allow the incorporation of models that demonstrably deliver outputs that are consistent with the wider market outcomes. Models that do not consistently deliver market reflective outputs should be excluded.

This approach suffers from the need to provide predetermined weightings for each model. Without assessing outcomes from the market, the MEU cannot see how the weightings can be established and therefore the approach introduces considerable doubt.

As with option 1, this approach displays the potential for the automatic integration of flawed outputs that are inconsistent with outcomes seen in the wider market. Also as with option 1 it suffers from using a blindly mechanistic approach.

On this simple analysis, the MEU does not consider that this is a feasible option and should not be used.

4. Several models and other data and a qualitative assessment

This approach should only allow the incorporation of models that demonstrably deliver outputs that are consistent with the wider market outcomes. Models that do not consistently deliver market reflective outputs should be excluded.

Whilst the approach provides the benefit of a number of apparently appropriate models to provide outputs, it introduces a considerably increased amount of regulatory uncertainty as to how the weighting of the various model outputs was implemented.

Providing the ability to vary to output based on current market evidence provides an outcome that can be seen and adjusted in context with the wider market evidence.

On this simple analysis, the MEU sees there is some merit inherent in the approach but queries that if the output is to be varied to reflect wider market evidence (and the MEU considers that wider market evidence must be implemented to ensure that the output is demonstrably efficient) then this tends to detract from the benefits of using a number of models in the development of the outputs. The Consultation Paper discusses the ability of the approaches to provide stability of the output calculated. As the MEU has expressed in its response to the Issues paper and at the forums, it does not see that stability of the RoE output over time is a critical driver in terms of smoothing prices. In this regard the MEU notes there many other impacts which make the prices vary year on year, so the desire to have a stable RoE over time is not as important a criterion as is implied in the Consultation Paper.

However, a long term investor would see there is a benefit from having the RoE stable over time, as the long term investor would want to see that the bases on which the decision was made to invest are being delivered in the long term. In contrast, an investor that is only seeking a short term return would prefer to see a more volatile RoE as this provides the basis on which to arbitrage the investment for sale to another investor. Network investments are made with long life assets so the regulator should consider the desires of the long term investor for a stable return.

The AER notes that theoretical and empirical evidence does not suggest that RoE is stable over time. This is true, as the market does show periods of higher and lower returns reflecting the economic status of the country at any one time. That said, the expectation of the long term investor RoE is that over time is that, it will receive the reward that was inherent in the decision to invest. So while reality does not reflect expectation, the driver to invest does reflect a longer term and consistent outcome by the time the asset has fulfilled its purpose.

The Consultation Paper discusses whether the models considered are better suited to some market circumstances than others and concludes that this is not a significant issue. The MEU tends to agree, but highlights that some models give spurious outputs that are not consistent with the market expectations or outcomes. The AER discussion regarding the models implies that there is no model that has been able to predict the future with accuracy and consistency over a range of market conditions.

Because of this, the MEU considers that empirical outcomes must carry more weight than models that are all identified as having shortcomings, but with some having fewer shortcomings than others. It is well recognised in investment circles, that there will be short term highs and lows in equity returns but over the long term, there will be a general trend of positive returns above the risk free rate. Investment managers (traders) buy and sell in the short term to maximise the return above the long term average¹⁵.

The MEU questions whether the investors in long lived assets (such as energy networks) consider that their returns on equity should reflect short term volatility that the various models are likely to deliver or be more stable over time. The AER has, at previous times, commented that they should set forward looking

¹⁵ and by this mechanism earn management fees

outputs which by their very nature would reflect short term market volatility. The MEU considers whether this view really is appropriate.

5.1 Questions asked

Question 5.1

Which of the four broad approaches to combining information to determine a return on equity is preferred and why? Are there additional broad approaches that we should consider?

See comments above. Overall, of the four options proposed, the MEU considers that option 2 provides a balance between simplicity and consistency, with the ability to modify the approach to reflect what is being seen in the wider market.

Despite this support, the MEU also considers that there is merit in examining the longer term trends for returns on equity which reflect the aspirations of long term investors rather than reflecting the short term-ism applied by traders in equities

Question 5.2

How can the various information sources relevant to estimating the return on equity be brought together transparently?

The MEU considers that models have a place in the evaluation of what is an appropriate return on equity, the MEU considers that empirical data is more reflective of what is actually occurring in he markets and therefore a more appropriate source of information to guide the setting of an appropriate rate of return.

As the network investments are seen as long term assets, the MEU considers the AER should look at the investment practices implemented by large capital intensive firms when assessing investments. Currently there is too much credence given to the commentary by network firms and decisions are made in isolation of what capital intensive firms in competition do in regard to their investments.

As noted in section 3.1, greater attention must be given to the actual outcomes network firms achieve in terms of return on equity. Comparisons of these returns needs to be made with outcomes seen in the wider markets (after making allowance for the differences in risk) so that adjustments can be made to the processes for setting future allowances for returns on equity. This will provide greater confidence in the process for future settings.

Question 5.3

Do stakeholders agree with our preliminary position that it is not feasible to change the weights placed on different return on equity models (over time) based on differing market conditions, industry segments or firms?

Settings of weights can only be arbitrary at best and based on unknown qualitative measures. Therefore to change weights based on changed market conditions will still be arbitrary. The MEU is concerned that changing weights due to changed market circumstances will introduce another basis for NSPs seeking change to increase the return on equity, regardless of whether such is justifiable in reality.

The MEU sees that attempting to vary "weightings" will end up like the setting of gamma, where gamma has been reduced over time based on "expert views" and "theoretical analysis" to the point where consumers have suffered considerable financial harm over the issue. If the current view of gamma is correct, it raises the fundamental question as to why the government ever introduced imputation at all, yet there is evidence that imputation has a much greater impact than is implied by the current setting of gamma.

Question 5.4

What are the benefits of using financial models to estimate the return on equity for an average firm before estimating it for the benchmark firm?

The risk of looking at the RoE independently of the gearing of the entity discounts the value of more efficient financing that an entity might be able to achieve. For example, a lower cost of debt should be achieved with a lower gearing, but lower gearing tends to reduce the rate of return on the larger amount of equity lower gearing causes.

The fact that NSPs have a more certain cash flow allows lenders to provide more debt than they would to a similar entity but without the highly certain cash flow. This means that the certainty of cash flow reduces the amount of equity required compared to the similar entity without the certainty of cash flow and therefore inflates the return on equity as the same amount of profit would be allocated over a lesser amount of equity, inflating the return on equity compared to a similar entity without the cash flow certainty.

6. Return on debt

6.1 Three approaches

The MEU notes with concern that the AER has assumed that there are only three options available to it for assessing debt and that these are defined in the rules. The three options detailed are (page 48)"

- "The return that would be required by debt investors in a benchmark efficient entity if it raised debt at the time or shortly before the making of the distribution determination for the regulatory control period.
- The average return that would have been required by debt investors in a benchmark efficient entity if it raised debt over an historical period prior to the commencement of a regulatory year in the regulatory control period.
- Some combination of the above.

For simplicity, we refer to these as the "on the day", trailing average portfolio and hybrid portfolio approaches, respectively."

The MEU points out that the rules do not allow only these three options. The words used in the Rules section 6.5.2(j) are:

"... the methodology adopted to estimate the return on debt **may, without limitation**, be designed to result in the return on debt reflecting [the three options above]" (emphasis added)

The MEU considers that this implies that the three options are not exclusive but can be expanded.

6.2 A revealed cost approach

The AER analysis of the MEU proposal for using revealed costs is flawed. The AER considers that using a revealed cost approach would reduce service provider's incentive to finance efficiently and therefore is contrary to the rate of return objective. The MEU begs to differ.

Under an incentive regulatory regime, each element of the cost build up is intended to be incentivised so that over the long term consumers will benefit. Incentives are to be put in place to minimise costs of providing the service to the efficient level. In the case of opex, the AER considers that the revealed cost of opex, when combined with an explicit incentive arrangement (the EBSS) will result in the most efficient cost as the NSP will seek to reduce its opex to gain the benefit of the incentive payment. The MEU agrees that such an approach should result in the NSP seeking to reduce opex to the efficient frontier.

The provision of debt is probably one of the most significant cost elements incurred by an NSP. Therefore the AER should be looking to incentivise the NSPs to minimise this cost impact and incentivise the NSP to find more efficient

ways of providing debt. The approach laid out in the Consultation Paper merely seeks a method to provide for the cost of debt that an NSP might incur – it does nothing to incentivise the NSP to seek more efficient ways of providing debt. Therefore the approach laid out does not comply with the implicit requirement of incentive regulation that the NSP should be incentivised to find the most efficient method and cost for the provision of debt.

Not only does the AER approach fail to incentivise the NSP to seek more efficient ways of providing debt, it does not provide a mechanism for consumers to benefit from the NSP doing its best to reduce the cost of debt. The energy Objectives require costs for providing the service to be efficient – that the costs the consumer faces are based on the most efficient method of providing the service. Should an NSP find a more efficient method for providing debt than was allowed by the AER then, under the approach laid out, the NSP is permitted to retain this benefit in perpetuity. The energy Objectives are about this benefit being ultimately transferred to consumers.

The MEU approach to using revealed costs for debt, accompanied by a sharing scheme, provides a methodology for incentivising NSPs to find the most efficient approach to debt provision and then transferring the benefits to consumers over time. As the AER accepts that such an approach works for opex, the MEU considers there is no reason not to assume that the same approach will not work for the provision of debt.

This approach has a number of other benefits in that it assumes that the actual debt cost is efficient (just as opex is assumed to be efficient) and reflects the risk profile of the NSP perfectly. This means the AER does not have to assess whether the amount and cost of the debt is:

"... commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the [service provider] in respect of the provision of [regulated services]"

As the Consultation Paper highlights, developing a similar risk profile and gearing for a benchmark entity is challenging so using the revealed costs combined with an incentive overcomes some of the difficulties highlighted elsewhere in the Consultation Paper.

On page 73 of the AEMC Rule Determination, it states that the rate of return on debt:

"...should try to create an incentive for service providers to adopt efficient financing practices and minimise the risk of creating distortions in the service provider's investment decision."

The first aspect of this quote is that there is to be an incentive for the NSP to adopt efficient financing practices. The purpose of such a requirement in an incentive regime is that the benefit of achieving such efficiency is that this will become a benefit to consumers. If there is no benefit to be transferred to consumers in the long term, why create an incentive? The MEU approach meets this requirement yet the AER approach does not – it merely establishes an allowance which the NSP can undercut and retain the benefit.

The second aspect is that the AER is required to ensure that the risk of investment distortions is to be minimised. Distortions will occur if the actual cost of debt is different to the allowed cost of debt – if the difference is positive (ie the allowed cost of debt is higher than the actual cost then over investment is incentivised, if the difference is negative (ie the allowed cost is lower than the actual cost) then under-investment is incentivised. Therefore to achieve this requirement the allowed cost and the actual cost should have a degree of alignment and the MEU approach delivers this.

6.3 RDB Paper

As part of the discussion regarding the cost of debt, the Consultation Paper makes reference to an ACCC Regulatory Development Branch (RDB) paper developing a method of overcoming the detriment of annual updating implied by the trailing average approach to the debt cost calculation.

The MEU earlier provided the following comments to the AER and the authors of the paper.

"[The MEU] appreciates the effort that the authors have gone into to produce this staff paper and it does address a number of concerns that consumers have. However it also seems to fail to address some other concerns

- [There is a concern] that the tenor of the staff paper seems to consistently
 address the risks the NSP faces (which is quite appropriate) but neglects to
 address the fact that consumers will pay for any excess of the cost of debt
 above the actual costs the NSP receives. This is a one sided view. [There is
 a] need to recognise that if the allowed cost of debt is higher than the
 actual cost of debt, it provides an incentive on the NSP to over invest and
 this incentive needs to be balanced with other incentives that are provided
 to the NSP
- The paper uses the corporate bond rate as the proxy with 5 tranches of 20% of debt being refinanced each year, yet debt is sourced from a number of other lenders ie borrowers have a portfolio of sources of debt, different costs for its debt and different dates of maturity. This point is addressed in section 9 but no conclusion is reached. It highlights that the NSP is incentivised to use these other sources of debt to reduce its overall cost of debt. [If] the regulator uses just one source of debt to set the benchmark then there is a real risk to consumers that the allowance for the cost of debt will exceed the actual cost of debt as has occurred in recent times.
- The approach provides a reason for the borrower to reduce the cost of debt because it is allowed to keep the savings. But under incentive regulation,

savings from efficient practices are intended to be passed onto consumers over time. There is no indication that the proposed approach provides any benefit to consumers. In fact, it seems to be of the view of the paper that the NSP would be able to retain all of its savings all of the time with no benefit to consumers from the NSP using more efficient practices.

The approach implies that an NSP will be incentivised to want longer periods between resets because it is allowed to retain the benefits of better debt management practices for longer periods. This would inflate the allowed cost of debt (longer term debt is generally more expensive) and therefore increase costs to consumers."

These concerns are still valid and the proposed approach of the AER outlined in the Consultation Paper does not address the concerns either.

6.4 Gearing

The AER is required to set the gearing of the "benchmark entity" to reflect the optimum level of debt. As noted in the MEU response to the Issues Paper, the level of gearing is determined to a large extent by the view of the lenders to a firm. The AER notes that the efficient level of debt is set at where the marginal return on debt is offset by the marginal benefits. The MEU considers this is unnecessarily complex. The MEU considers that a clearer way of stating this, is where the marginal cost of new debt matches the cost of equity is the theoretical point of optimum gearing, because debt has a lower cost to the firm than equity¹⁶. However, lenders will not lend to this point as the risks are too high, and so actual gearing will be lower than the theoretical point.

The certainty of being able to realise the asset value and the ability to cover the interest payments comprise the two foremost criteria assessed by lenders. Because a monopoly providing an essential service will retain its asset value more than an entity in competition and because the cash flow achieved by a monopoly of an essential service is much more certain, regulated monopolies provide greater certainty on cash flow and asset value retention than do firms operating in competitive markets.

The Consultation Paper posits that as the true value of gearing for the benchmark entity is unobservable, the approach of assessing the values of debt and equity of firms that will be included in the return on debt dataset. The MEU is quite concerned about this;

The MEU considers that the cost of debt to firms (regardless of whether in competition or not) will be much the same for firms with the same credit rating. Therefore the dataset should encompass a much wider group of firms than just

¹⁶ This is because the lenders have greater security over cash and assets than do equity providers

those which are regulated monopolies. If the dataset includes such firms (and the MEU considers that the cost of debt assessments should be based on such a wider dataset) then the dataset will include firms which do not enjoy the benefits of being regulated monopolies of essential services¹⁷ but which have the same credit rating.

Even firms with the same credit rating will have different extents to which lenders will provide debt (and therefore influence gearing) based on the certainties of asset value retention and coverage of interest. As a result, firms in competition will have a lower gearing than regulated monopolies. Therefore using the wider dataset will bias the outcome as to what is appropriate gearing.

The MEU considers that gearing should be that which is reflected across regulated monopolies and not include firms which are operating in a competitive environment.

6.5 Trailing average and Hybrid

The debt risk premium is essentially assessed from the difference of a forward looking cost of debt less a forward looking risk free rate. This means that to a large extent, the debt risk premium is an artificial construct rather than a separate cost observed in the market.

Firms do not acquire debt on the basis of a risk free rate plus a debt risk premium and nor do lenders provide debt on this basis. Debt into the future is an observable costs – lenders will lend at identifiable costs for a predetermined period into the future. Therefore a more representative view on what is the cost of debt at any point in time is the full value of the cost. In contrast, the hybrid approach requires an attempt to deconstruct and then reconstruct the costs. The trailing average approach reflects actuality whereas the hybrid does not.

The MEU considers that the hybrid approach adds an unnecessary level of complexity to the calculation but does not create a more accurate representation of what debt costs will be in the future. As the hybrid approach cannot improve accuracy of the calculation, the MEU does not consider the hybrid approach should be used.

6.6 Weighting

It is posited that the weighting over time could/should reflect the forecast of when debt is to be renewed, what the changes in the RAB might be and the proposed capex. In theory, this might provide a more accurate forecast of the total cost of debt, but it also provides the opportunity to game the process, introduce debates as to what the forecast debt profile might be and therefore what weightings should be used.

¹⁷ Therefore lenders will not provide as much debt to firms in competition

One reason for why different weightings might apply is that the needs of the NSP might require more debt at different times, such as for capex which is "lumpy". In practice, actual capex varies from forecasts anyway, but the actual impact of capex in relation to the overall debt portfolio is relatively small – annual capex as a proportion of RAB usually lies in the range of 5-15%, so variations in capex will have a marginal impact

The MEU agrees with the AER that a predetermined weighting approach needs to be established which is a simple and has a consistent (unweighted) proportion applied for each year.

6.7 Annual adjustment or not

The cost of debt allowance should be as close as practicable to the actual cost of debt incurred by the NSPs – it should not be a source of additional profit (the profit an NSP makes should be embedded in the return on equity and from the benefits of incentives). Equally, the rules and the Law pricing principles) state unequivocally that an NSP is entitled to recover at least its efficient costs.

Therefore, when looked at this way, there has to be a "true up" to ensure that there is no unexpected over or under recovery. The issue then becomes one of whether the true up is done annually or at the end of the period. If the amounts are small, when assessed annually, then there would appear to be little reason to impose this adjustment at the end of each year.

Under a revenue cap approach, there is already a "true up" process required (under/over recovery and settlement residues, etc) so adding an annual true up for debt does not significantly add to the processes already in place – one which adjusts for both large and small movements. Under a price cap, the NSPs can adjust (and do) individual tariff prices as long as they remain under the weighted average price cap adjustment, so there is also a process for adjusting the price cap and individual prices within tariffs.

The MEU has observed that there seems to be some debate as to the size of a five year "true up" adjustment and at a reset there are already significant changes (usually increases). Adding another large increase will exacerbate this. There could also be falls (like those from the lower RFR) which would be a welcome offset.

The MEU notes that whilst most resets are done each 5 years, an NSP has the right to seek a longer term. For example, initially APA sought a 10 year term for its recent Murraylink reset, so whilst the assessments are being made on the assumptions that resets will occur each 5 years, this is not always the case and the impact of a "true up" after 10 years might be much larger than contemplated..

On balance the MEU considers that an annual adjustment does not add an onerous imposition, will provide a smoother price path, is more reflective of what occurs in the wider economy and reflects the aim that the allowed cost of debt should be as close as possible to the actual cost.

6.8 Transition

Concern has been raised that the change from the current "on the day" approach to the "trailing average" approach at the NSP's next reset will require transition arrangements. Whilst there are some regulatory activities that do require a transition, the MEU does not see a transition program is need for a change in the setting of the cost of debt.

Under the current rules, all debt is assumed to expire at the end of the regulatory period. NSPs (or their parents) already have a portfolio of debt (in terms of source, type and term) as this is the most efficient approach and minimises risk; some hedge their portfolios to the rate set at the start of a new period to further minimise risk. Government owned NSPs effectively have a line of credit with their related Treasury Corporations so a change in approach will not impact them as they currently draw down their debt as needed.

The MEU considers this apparent need to implement a transition program does not reflect the actuality of what is obviously occurring across the regulated NSPs now, The trailing average approach still sets a new cost of debt at the start of the regulatory period and the only difference is that the cost of debt to be set in subsequent years will vary a little each year there after. This is no different to what NSPs are seeing (and doing) now so the trailing average approach will effectively reduce risk for NSPs as it will reduce the differential between what the initial allowance was at the start of the period and what is seen by the NSPs each year thereafter.

In contrast, if the change was to be from a trailing average approach to an "on the day" approach, the MEU would consider that there is a need for a transition as the risk increases for NSPs

The MEU does not see the need for a transition period for changing from the current "on the day" approach to the trailing average approach.

6.9 Sources of debt

The Consultation Paper proposes that a simple approach (using fixed rate bonds) be the only source of debt costs, as information on these would be publicly available whereas the costs for other sources of debt are not.

The RDB paper comments that, although the AER approach would appear to be based on using corporate bonds as the basis of assessing debt costs, only 1/3rd of the debt used by regulated networks comes from this source and the paper

provides the sources of the other 2/3rd of debt used by energy networks. The RDB paper then comments (page 53):

"However it should be explicitly recognised in decisions that such a method [using just corporate bonds] over time will result in a conservative cost of debt estimate favouring the regulated business."

Such an outcome cannot be seen as ensuring that financing based on this approach will be efficient and therefore an approach based on one source does not meet either the energy Objectives or the RoR objective.

The MEU notes that, if corporate bonds only comprise 1/3rd of all debt sourced by NSPs, then it is unlikely to be the lowest cost source of debt – if it were the lowest source, then it would comprise a larger proportion of all debt. In the case of the government owned NSPs, they source their debt from their related treasury corporations at rates well below corporate bond rates, as has been highlighted consistently for many years.

The MEU therefore considers that the AER needs to ensure that the cost of debt reflects the bulk of the debt sourced by NSPs rather than rely merely on one source which is probably at the higher end of the cost scale. To do otherwise is to impose on consumers an unnecessary cost.

6.10 Data Set

The current approach using the Bloomberg fair value curves (BFVC) has been demonstrated empirically that it does not result in a representative outcome for the cost of the debt used by NSP nor of the cost of corporate bonds issued by NSPs (and their parents). Further the BFVC are not representative of the credit ratings of NSPs as observed and require both extrapolation and interpolation.

The AER needs to have a data set that reflects both the wider market (to identify the cost of debt for similar credit rated firms) and for regulated monopolies (to identify the level of gearing that such firms are able to operate at.

The fact that the BFVC are demonstrably wrong and that there does not appear to be an alternative, makes the MEU firmly of the view that the AER must develop its own dataset for use in regulatory decisions.

6.11 Term of debt

The MEU is of the view that under an "on the day" approach, the term of the debt should reflect the term of the regulatory period. This is internally consistent and reflects the essential reality that the debt is secured only for the regulatory period and is then renewed at the next reset at the new prevailing rates. To assume that an NSP will secure 10 year debt (as the AER has under the old rules) for a five year regulatory period, is basically inconsistent.

The MEU agrees with the arguments espoused by the ERA in its recent decision for Western Power to utilise a shorter term for debt reflecting the average term of a debt acquired by firms. As this approach more closely reflects the reality of how firms acquire debt, the MEU considers that the AER should take a similar approach to that of ERA and assess what is the average term of debt across the wider market, as this will provide guidance as to how the market as a whole minimises the risk inherent in acquisition of a debt portfolio.

6.12 Credit rating, issuer industry and currency of issuance

As noted earlier, credit rating is not industry based but reflects the ability of the firm to under pin the amount of debt and cover the interest payments. As part of this assessment, the credit rating varies with the gearing of the firm as well.

There is empirical evidence that regulated monopolies are able to experience higher gearing than firms in the competitive sector without suffering a lowering of credit rating. Therefore the AER needs to ensure that the credit rating it applies reflects the gearing of the NSPs as a group. This means that it needs to assess the actual credit ratings of the regulated NSPs with the level of gearing they have. This would set the average credit rating in concert with the average gearing of regulated monopolies. The two when combined provide the basis for the next stage of assessment.

A credit rating is not industry specific and is intended to provide lenders with the ability to rank borrowers. So once the AER has determined an average credit rating for energy NSPs it can use data from all other similarly rated firms regardless of the industry they operate in.

It is obvious that many firms including energy NSPs have sourced debt from overseas lenders as this has resulted in a lower cost of borrowing. To manage the risk inherent in accessing debt in an overseas currency, Australian borrowers use exchange rate "swaps" to convert the overseas debt into Australian dollars. This means that the overall cost of the debt is the sum of the cost of the overseas debt plus the cost of the swap. A firm will only carry out such an arrangement if the overall cost is lower than the Australian market.

The MEU considers that the AER must recognise that the level of gearing and credit rating are closely intertwined and must be assessed together. This is in stark contrast to the approach used in the 2009 WACC review where the credit rating and gearing were separately assessed and individually determined.

If secure overseas debt is available and can be sourced at a lower cost (including exchange rate swaps) then this must be used as an element in setting the cost of debt.

6.13 Questions asked

Question 6.1

Do you support our proposal of having a single approach for estimating the return on debt should be used for the definition of the benchmark efficient entity (or for each definition, if more than one benchmark is used)?

No, see comments above, especially sections 4, 6.4, 6.10 and 6.12

The MEU considers that the development of the benchmark gearing should reflect the actual gearing used by regulated monopolies as this reflects the benefits seen by lenders of the certainty of asset value retention and the security of future cash flows.

The credit rating awarded the regulated entities reflects their ability to gear higher than firms in a competitive market and should therefore be set in conjunction with the assessment of gearing.

Question 6.2

How do the "on the day" approach, trailing average portfolio approach, and hybrid approach to estimating the return on debt compare in terms of promoting efficiency?

See comments above, especially in section 6.5.

A trailing average approach more closely reflects what occurs in the acquisition of debt in the wider market. Debt is acquired on a portfolio approach (source, cost and term) because this minimises risk. Whilst it might be possible to source a lower cost of debt at any one point in time, the risks inherent are very large.

Question 6.3

What are the considerations that we should have when setting the gearing level?

See comments in response to question 6.1 and in sections 4, 6.4, 6.10 and 6.12 above.

Question G.1

How should we address the issues regarding annual updating of the return on debt estimate?

See comments above, especially sections 6.7 and 6.8

Question G.2

What should be our considerations when deciding whether transition between benchmarks is required? How should we apply transition while retaining the properties of incentive-based regulation?

See comments above, especially section 6.8.

The MEU considers there is no need to transition from "on the day" to "trailing average" but a transition would be appropriate to transition the other way (from trailing average to "on the day".

Question G.3

To what extent does the estimation method need to incorporate the different types of debt available to a business in order to be consistent with the Rate of Return Objective?

See comments above, especially section 6.9.

In the wider market, debt is obtained from a variety of sources. To exclude these from the cost of debt build up is likely to force consumers to pay more than the efficient cost and this is not in accordance with the energy Objectives nor the rate of return objective. The AER has the responsibility to set a return on debt that reflects efficient practices.

The MEU recognised this when it decided that a revealed cost approach is more likely to achieve the energy objectives and the RoR objective.

Question G.4

Should we develop our own dataset for estimating the return on debt or use a third-party source such as Bloomberg? What would be the key considerations in developing our own dataset and how should they be addressed?

Yes. See comments above, especially section 6.10

Question G.5

When selecting bonds for use in the estimation—either in an AER-developed dataset or a third-party dataset—what should be our selection considerations in terms of maturity, credit rating, industry sector and country of issuance?

See comments above.

The term of the debt should reflect the average across the wider market, the credit rating should be assessed concurrently with gearing using data from all regulated monopolies, the source of debt costs should reflect only the credit rating and use the wider market data and overseas bonds should be included if the cost of the debt plus the exchange rate swap is lower than the Australian market data, as this would reflect where such debt would be sourced from.

Question G.6

Do you support our proposed methodology for determining the gearing level?

No, see comments above, especially sections 6.4 and 6.12

7. Other issues discussed

In addition to the core issues raised in the Issues Paper and readdressed in the Consultation Paper, the Consultation Paper also raises other aspects for discussion

7.1 Imputation credits

The purpose of assessing imputation credits is to allow a regulated network a larger revenue because there is an assumption that some shareholders will not benefit from imputation of the network's dividend paid to shareholders. The AER therefore increases the revenue allowed to a network to compensate for those shareholders not being able or willing to benefit by having shares fully or partially franked by the network.

This increased revenue is paid by consumers to keep shareholders "whole" because of decisions made by the firm (not to fully frank dividends) or by the shareholder not using the benefit. These decisions are outside the control of consumers.

As discussed in earlier sections, the MEU is very concerned that value granted to imputation in the regulatory assessments has been grossly mis-managed, particularly by the Competition Tribunal.

At the most fundamental, the implication of the current approach to valuing imputation credits is that only 25% of dividends are subject to imputation. There is little doubt that the cost of managing imputation is significant. When the costs are balanced against the ACT decision to assume only 25% of dividends are subject to imputation, the value of imputation would have to be seen as marginal.

However, it is clear that government does not concur with the ACT assessment of the value of imputation, as there has not been any substantive discussion that imputation should be eliminated. To the contrary, there is continuing support in government for retaining imputation. This means that at a more general level, there is a view that imputation has a greater value to the community than implied by the ACT decisions.

This high level view is at odds with the low value apportioned to gamma, regardless as to how gamma is derived. The MEU does not have any more substantive understanding of the issue than has been addressed in the Consultation Paper but it does raise the issue of compounding of conservatism as a potential source of the low values of gamma calculated using the techniques currently in use. The MEU considers that one reason for such a low value given to gamma is that a conservative value used for the payout ration multiplied by a conservative value for the utilisation rate results in an excessively conservative output – one that appears too low and out of step with general community and government expectations.

In assessing gamma, the AER needs to recognise that:

- Over 80% of electricity networks are owned by governments which receive the tax calculated as payable as a dividend rather than incur it as a cost
- The large majority of gas networks and pipelines are owned by firms listed on the Australian Stock Exchange and shareholders know whether they will be able to benefit from imputation before they purchase the shares in these companies
- Those overseas companies that have invested in Australian energy networks invested in the full knowledge that imputation benefits were available for Australian tax payers and that they would not benefit from imputation – therefore not receiving the benefit of imputation was not a significant consideration of their decision.

Firms generally fully frank their dividends and a decision not to provide fully franked dividends is made uniquely by the firm paying the tax. Further, if a shareholder decides not to take up its entitlement this is a decision for the shareholder. If a shareholder is not a tax payer in Australia, it has already made the decision that it will not benefit from imputation from an investment it makes. It should not expect to receive a benefit in terms of the higher dividend it will receive because the AER has allowed for a higher revenue in its decision.

On this basis, it is not an issue for the regulator to "second guess" whether fully franked dividends will be provided or if the shareholder takes up the benefit.

The MEU therefore is of the view that the AER should assume that the network will fully frank its dividend and that that benefit will be taken by all shareholders as intended. This would means that the AER would allow a revenue stream based on the assumption that all dividends will be fully franked and the benefit will be used by shareholders as intended by the tax legislation.

7.1.1 Questions asked

Question 7.1

Should we still estimate gamma as an economy wide measure? Alternatively, should we seek to narrow the gamma benchmark? If so, what is a more appropriate benchmark?

Gamma should be estimated on the basis that is intended by the tax legislation – that there should be no double taxation on Australian shareholders and that all shareholders will use the benefit to the maximum. Overseas shareholders have already made the decision to invest knowing they are not entitled to the benefit of imputation.

Therefore the AER should not increase the allowed revenue to reflect the fact that a firm might not provide fully franked dividends or that a shareholder might not use the benefit provided by imputation.

Question 7.2

To what extent do stakeholders support the use of a definitive source of evidence, even where it has demonstrable shortcomings? Alternatively, to what extent do stakeholders support the use of a wider range of evidence, having regard to its strengths and weaknesses?

See comments above in section 7.1.

7.2 Debt and equity raising costs

The Consultation proposes that as they are a small element of the total allowed revenue for a network, the cost of calculating the debt and equity raising costs is out of proportion to the allowance made.

The Paper goes on to state that in nearly half of all reviews, there was no allowance made for equity raising costs, implying that the effort to show that there would be no equity raising cost is significant.

The MEU sees that there are four basic options available:

- Excluding the cost as being insignificant
- Using a revealed cost approach
- Continue as now
- Hiding the cost in some other element (as proposed)

Of these options, the MEU considers that if the cost is insignificant, then there is little reason to include the cost at all. There is already considerable conservatism built into the development of the building block approach¹⁸ and because of this to consider that an insignificant cost is effectively included in the allowance is a pragmatic approach to the reality of how the regulator operates.

If the costs of equity and debt rasing need to be accommodated in some fashion, the MEU considers that the revealed costs incurred by the NSP provide a simple and effective method for providing an allowance. In this regard, the

¹⁸ The AER has openly acknowledged that it will take a conservative view in developing the building block so that any bias in outcome will be in favour of the NSPs as the risk of an under-estimate has a more severe impact on consumers than the impact of an over estimate

MEU notes that there is very infrequent equity raisings by NSPs¹⁹. The MEU notes that across the wider market, equity raisings are few with the large majority of firms using retained earnings as their source of new equity. This is reflected amongst the NSPs where the few market equity raisings are almost entirely related to funding a new acquisition rather than raising equity for planned capex. So a revealed cost approach for providing an allowance for this activity makes sense.

The third option (continuing as currently happens) is acceptable but with the caveat that care has to be taken in relation to equity raising for the reasons noted in the paragraph above. To provide an allowance for raising new equity that does not occur is to impose unnecessary costs on consumers is not warranted.

The MEU does not agree with the last option – that proposed in the Consultation Paper. The MEU has a concern that by rolling the cost of debt and equity raising into another element of the building block the allowance becomes non-transparent and thereby a source of future contention. If this happens, then there is the potential that consumers will be exposed to "double dipping" at some point in the future.

7.2.1 Question asked

Question 8.1

Do you support our preliminary position of not setting a specific allowance for debt and equity raising costs, and instead, remunerating them elsewhere in the revenue building blocks?

No. See comments above.

7.3 Forecast inflation

Historically, regulators used the difference between indexed bonds and nominal bonds (using the Fisher equation) to forecast inflation. The reasoning for this was that this was a market based view on what inflation was likely to do in the future. This method was discontinued when arguments were presented that the yields on indexed bonds appeared to indicate that the inflation forecasts were wrong. This reason for this was that the trade in indexed bonds was seen to be quite illiquid

The current approach was developed to overcome this apparent problem. The benefit of the current approach is that the RBA has the responsibility to keep inflation within a narrow band. To achieve this, it also has more information available to it which assists it in being able to make short term forecasts of

¹⁹ This supports the observation of the AER that an allowance for equity raising occurs in only about half of reset reviews

inflation, possibly with greater accuracy than other forecasters. The RBA is also independent and therefore is unlikely to produced biased forecasts.

The Consultation Paper suggests that there could be a change from the current approach and suggests that the forecast inflation could be sourced from:

- The Fisher equation (as previously)
- Australian indexed swaps
- Forecasts (eg by economists)

The Consultation Paper does not seem to consider continuing with the current approach.

As noted above, the current approach uses the forecasts and target range provided by the only entity that has the ability to act so that its forecasts might be achieved. The other methods rely on forecasts by no one with the ability to change the rate of inflation.

The AER has consistently been of the view that risk should be managed by the party most able to manage the risk. In this case, the RBA has the ability to impact the risk and therefore it would appear that the RBA would have the best ability to forecast the most accurately.

The other methods proposed rely on perceptions of what inflation might be rather than having an ability to implement an outcome. On this basis, the MEU considers that the current approach has the potential to be the most accurate of the various methods of forecasting and therefore should be used.

7.3.1 Question asked

Question 9.1

Should we continue to use our current approach to forecast inflation or move back to using the Fisher equation? Alternatively, should the AER use inflation swaps? Are there other approaches not identified in this paper that we should consider?

See comments above. The MEU considers that the current approach recognises that the RBA has the ability (to some extent) to achieve the outcome it sets itself. This must be seen as providing a more accurate forecast.

In contrast, the other methods rely on perceptions of others to generate a forecast.