AEMC Consultation Papers: rule change proposals relating to the economic regulation of electricity (ERC0134 and ERC0135) and gas (GRC0011) networks

The Financial Investor Group

8 December 2011

Contents

1. Executive Summary

The Financial Investor Group ("FIG") welcomes the opportunity to provide a submission to the AEMC's Consultation Papers on the rule change proposals ("the proposals") regarding the economic regulation of electricity and gas networks.

The FIG is an affiliation of the major investors in Australian energy network assets. Its members compete for the ownership of infrastructure (including regulated energy network) assets, and for investors' funds that are, or may be, seeking exposure to the asset class.

This submission focuses on the key issues and evidence that the FIG believes the AEMC (and policy makers generally) should take into account in assessing the merits of the proposals.

The proposals are of considerable importance to investors primarily because they are being proposed within 5 years of the life of the current rules and they would significantly change the regulatory regime (e.g. how opex and capex benchmarks and the cost of capital are set).

The FIG believes that a high burden of proof should be met before making significant rule changes because:

- there is an inconsistency between the life of the rules, as envisaged by the proponents, and the life of the assets the rules regulate. Significant rule change every five years, which would become the expectation if the proposals were accepted, is fundamentally inconsistent with providing regulatory certainty for assets with far longer lives;

- the proposals significantly change the regulatory regime because they generally provide the regulator with more discretion, but lower accountability; although in gas, they would technically provide increased prescription, but further reduce accountability. The FIG therefore has in-principle concerns with the general direction of the proposals;

- such an outcome would ignore:

  - what the regulatory regime has delivered over the longer term. The evidence in this submission shows that it has facilitated significant efficiency improvements by many network businesses, whilst meeting higher standards of service and adapting to meet emerging industry challenges;

  - the actual price 'problem' the proposals appear to be trying to address, which is isolated to part of the network sector (i.e. electricity networks in NSW and Qld); and

  - the AER's performance in executing the rules, which may be more the relevant variable than any fundamental flaws in them. This submission documents that evidence, and should properly form part of the AEMC's assessment.

As a result, the FIG does not believe that the key rule change proposals have met this burden of proof. There are, however, a few more technical amendments that may assist the AER in undertaking its role, and on which the FIG would defer to the views of its members' asset companies and the relevant industry associations.

In relation to the key specific proposals, the proponents have generally not:

- provided relevant or objective evidence on the existence of the asserted problem. In some cases (e.g. setting expenditure benchmarks and capex 'overspend'), the evidence does not support the assertions made; nor

- articulated the economic benefits that the rule changes would provide, although some could significantly reduce the businesses' revenues.

At the same time, there does not appear to be acknowledgement of the costs of the proposals in terms of the regulatory uncertainty they create. As the AEMC is aware, the costs of regulatory uncertainty are very evident at the present time in other parts of the energy supply chain. These costs are often more difficult to observe in the network part of the supply chain due to the nature of the services provided, but they are material.

Regulatory uncertainty increases the risk of investing in regulated energy infrastructure and is the key risk faced by investors and potential investors in such assets. For example:

- significant changes in how the regulator proposes to estimate the cost of capital may allow the regulator to materially reduce the businesses' revenues, particularly if there is no capacity to seek merits review of those proposals. But they would also increase the risk of further significant changes in the cost of capital in the future; and

- three years after the Global Financial Crisis ("the GFC"), the results of which continue to affect markets, the AER is yet again proposing that the cost of equity should be reduced substantially (i.e. from around 11-12% currently to around 9%). The AER's view appears to be that, despite the GFC, required rates of return today are significantly lower than those required before it.

It is perhaps worth noting that the AER is making these decisions under the current rules; on which it is generally seeking more discretion and much lower accountability.

Regulatory behaviour like this undermines investor confidence, particularly where there is considerable ongoing market volatility. This problem arises when regulators do not pay sufficient regard to the market evidence in estimating the cost of capital and, most importantly, do not bring a commercial and practical perspective when interpreting that evidence (e.g. whether current market conditions have changed investor expectations on those that are likely to prevail). Again, the submission provides the relevant market evidence, which is consistent with the thrust of the evidence the FIG presented during the AER's first WACC review.

The investment challenge, however, remains unchanged. Australian energy networks are expected to spend over $40 billion in network capital expenditure in the period to 2030. This is before accounting for the investment needs that are likely to emerge to ensure the network sector is in a position to facilitate the changes in energy production and consumption necessary to address climate change (e.g. investment in renewable and smart grids).

The FIG does not believe that the AER's key proposals are consistent with meeting this investment challenge, nor are they in the long term interests of consumers.

2. Background

2.1 Rule change proposals

AER rule change proposals

On 29 September 2011, the Australian Energy Market Commission ("AEMC") received some rule change proposals from the Australian Energy Regulator ("AER").[1] The AER's rule change proposals relate to aspects of:

- the economic regulation of electricity networks (ERC0134 and ERC0135) under the National Electricity Rules ("NER"); and

- the rate of return for gas networks (GRC0011) under the National Gas Rules ("NGR").[2]

On 20 October 2011, the AEMC gave notices under the relevant provisions of the National Electricity Law ("NEL") and National Gas Law ("NGL") to assess the rule change proposals received from the AER.

EUC rule change proposal

On 18 October 2011, the AEMC received a rule change proposal from an Energy Users' Rule Change Committee ("EUC"), which represents Amcor, Australian Paper, Rio Tinto, Simplot, Wesfarmers, Westfield and Woolworths.[3] It relates to the calculation of the return on debt for electricity network businesses under Chapters 6 and 6A of the NER.

The EUC's rule change proposal raises a similar issue to that raised by the AER. Given this, on 3 November 2011, the AEMC decided to consolidate these rule change proposals.[4]

2.2 The Financial Investor Group

The Financial Investor Group ("FIG") welcomes the opportunity to provide a submission to the AEMC's Consultation Papers on the rule change proposals ("the proposals").

The FIG is an affiliation of the major investors in Australian energy network assets. Its members compete for the ownership of infrastructure (including regulated energy network) assets, and for investors' funds that are, or may be, seeking exposure to the asset class.[5] Specifically, this submission has been prepared on behalf of:

- The APA Group
- ACTO Gas Australia
- Cheung Kong Infrastructure and Power Assets
- The DUET Group – jointly managed by AMP Capital Investors and the Macquarie Group
- Envestra
- Hastings Funds Management
- Singapore Power Group

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[1] AER, Economic regulation of transmission and distribution network service providers: AER's proposed changes to the National Electricity Rules, September 2011. AER, Rule change proposal, Price and revenue regulation of gas distribution and distribution services: AER's proposed changes to the rate of return provisions in the National Gas Rules, September 2011

[2] AEMC, Consultation Paper: National Electricity Amendment (Economic regulation of network service providers) Rule 2011; National Gas Amendment (Price and revenue regulation of gas services) Rule 2011, 20 October 2011

[3] EUC, Proposal to change the National Electricity Rules in respect of the calculation of the Return on Debt, 17 October 2011

[4] AEMC, Consultation Paper: Consolidated Rule Request – National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2011, 3 November 2011

[5] The original FIG members also included Babcock and Brown Infrastructure (now Brookfield, although it no longer owns regulated energy network assets in Australia).

► Spark Infrastructure.

FIG members have interests in well over $30 billion of Australian energy network assets, most of which are regulated. This is a substantial proportion of Australia's privately owned energy network assets, and about 40% of those subject to economic regulation.[6] Table 1 below provides some details of the key assets owned by FIG members.

Table 1: Description of key assets

Investor	Description of key assets
The APA Group	The APA Group is the manager of a listed energy infrastructure vehicle with interests in more than 12,000 km of gas transmission infrastructure, over 2,800 km of gas distribution network in Queensland, two high voltage direct current electricity interconnector systems and other energy related assets.
ATCO Gas Australia	ATCO Gas Australia is part of the ATCO Group, with $11 billion of assets in the utilities (pipelines, natural gas and electricity transmission and distribution), energy (power generation, natural gas gathering, processing, storage and liquids extraction) sectors, structure & logistics and technologies sectors. In Australia, it owns the WA Gas Networks Distribution Systems.
Cheung Kong Infrastructure and Power Assets	Cheung Kong Infrastructure (CKI) is a listed infrastructure company in Hong Kong with diversified investments in energy, water and transport infrastructure. CKI holds a 39% interest in Power Assets, a global investor in power and utility-related businesses with investments in electricity generation, transmission and distribution, renewable energy and gas distribution. Power Assets owns HK Electric which is responsible for the generation, transmission and distribution of electricity on Hong Kong Island. Together CKI and Power Assets have a 51% interest in ETSA Utilities, CitiPower and Powercor (combined RAB of $7 billion), a 19% interest in Envestra, an 8.5% interest in Spark Infrastructure. They also own Wellington Electricity in New Zealand, three electricity distribution networks in the UK serving 8 million customers, a gas distribution network in the UK serving 2.6 million customers, and a water and waste water distribution network in the UK serving 4.5 million customers.
The DUET Group	The DUET Group is a listed energy infrastructure vehicle which has interests in the Dampier to Bunbury Natural Gas Pipeline (80%), United Energy Distribution (66%), and Multinet Group Holdings (100%).
Envestra	Envestra is Australia's largest listed specialist natural gas distribution company, owning over 22,000km of networks in Victoria, South Australia, Queensland, New South Wales and the Northern Territory. Envestra delivers 110 petajoules of natural gas to over one million customers across its networks.
Hastings Funds Management	Hastings Funds Management is the manager of a range of listed and unlisted energy and other infrastructure vehicles, wholly owned by Westpac Banking Corporation. Its energy infrastructure includes interests in ElectraNet and Epic Energy. It also owns interests in electricity generation, water, airport, port, road, rail and timber assets across Australia, USA, the UK and Europe.
Singapore Power Group	Singapore Power Group owns and operates electricity and gas transmission and distribution businesses and provides energy market support services in Singapore and Australia. In Australia, SP Group owns SPI (Australia) Assets a diversified energy utility company whose assets include the Jemena companies, and 51% of SP AusNet, an owner and operator of electricity transmission and distribution networks and gas distribution assets in Victoria, Australia.
Spark Infrastructure	Spark Infrastructure is a listed energy infrastructure vehicle which holds a 49% interest in each of CitiPower, Powercor and ETSA Utilities.

The key assets owned by FIG members that are relevant to this review therefore include:

[6] These estimates are based on AER data. See AER, State of the Energy Market Report, 2010. They rely on RAB values for regulated and actual cost for non-regulated assets, but exclude recent capex for certain assets due to information constraints. By value, the vast majority of these assets are subject to formal economic regulation.

- the Victorian and South Australian electricity network industry (i.e. where it has been privatised in Australia); and

- a significant proportion of the national gas network industry, particularly where it is regulated (i.e. distribution).

The FIG therefore has a strong interest in how Australia's energy network infrastructure is regulated, both directly and on behalf of its members' investors. However, the FIG typically leaves regulatory issues to its members and their asset companies, which are often the regulated entities and who work closely with regulators, and to the relevant industry associations. Occasionally, however, a regulatory issue arises which the FIG believes is sufficiently important to warrant investors separately communicating their perspective.

The FIG was, for example, first drawn together by concerns about the nature and direction of the AER's first review of the weighted average cost of capital ("WACC") parameters for electricity network businesses under the NER. Specifically, the FIG commented on the AER's approach, which in estimating parameter values focused almost exclusively on technical matters and paid little regard to market conditions.[7] This was in the midst of the Global Financial Crisis ("GFC"), the impact of which continues to affect markets.

The rule change proposals, unfortunately, raise similar concerns.

The FIG believes that its submission to the AER's WACC review made an important, evidence-based contribution to the debate, and assisted the AER in making a better decision - one more consistent with the National Electricity Objective. Subsequent events have shown, however, that the AER could still have made a better decision (see Section 4.2.2).

FIG submissions aim to bring a commercial and practical perspective to regulatory debates which can become highly technical and quite contested between stakeholders dealing with such issues on an ongoing basis. The FIG believes this perspective is critical because it is the same one that investors bring when making investment decisions.

2.3 Why this submission has been prepared

The FIG is fully aware that the energy networks owned by its members enable the delivery of what in most cases are 'essential services' and that material price increases will therefore invariably become an issue of considerable interest and importance. It is also aware that electricity prices in most states have increased considerably in the last few years and this is expected to continue over the medium term. This has led to debates about:

- the impacts on consumers and industry competitiveness; and

- the causes of the price increases, including the contribution of network charges.

The latter has led to a debate on the role that network regulation may have played in causing higher network charges. It is evident from these debates that:

- electricity prices are currently a major political issue in Australia and this is having a significant impact on Government policy; and

[7] FIG, Submission to the AER's WACC parameter review: The investor perspective: January 2009. The FIG has also made submissions on reviews of the cost of capital by Western Australia's Economic Regulation Authority. FIG, Submission to the ERA's Draft Decision on Goldfields Gas Transmission's Proposed Revisions to the Access Arrangement for the Goldfields Gas Pipeline, December 2009. FIG, Submission to the ERA's Draft Decision on Western Power's Proposed Revisions to the Access Arrangement for the South West Interconnected Network, September 2011

- there appears to be a commonly held view (see Section 3) that network charges have been a major contributor to the recent increases in electricity prices. These parties also believe that deficiencies in network regulation have made a material contribution to the increases in network charges, and thus, retail electricity prices.

This has led to the rule change proposals relating to both electricity and gas that are the subject of the AEMC's consultation process and calls, including by the AER, for changes in the electricity law to remove or reduce the ability of stakeholders to seek merits review on the AER's decisions. The proposals to change the electricity law are the subject of a separate process, but the FIG understands that governance of network regulation is a priority issue of the new Standing Council on Energy and Resources.[8]

The proposals are of considerable importance to investors primarily because they are being proposed within 5 years of the life of the current rules and they would significantly change the regulatory regime (e.g. how opex and capex benchmarks and the cost of capital are set). They are therefore of considerable importance to investors in regulated energy network assets.

This submission focuses on the key issues and evidence that the FIG believes the AEMC (and policy makers generally) should take into account in assessing the merits of the proposals. This submission is unlikely to be its, or the, final word on the matter. Indeed, it is likely to be supported by substantial contributions by the FIG members' asset companies and the relevant industry associations, as the process progresses.

2.3.1 What the AEMC is seeking

The AEMC is seeking comments covering the following questions:

- The problem – is there one?

- Is the balance between regulatory prescription and discretion right? Could the AER use the discretion it already has (i.e. does its discretion need to be expanded - or, in the case of the gas rules, does the regime need to change at all)?

- Are there any preferable solutions to the problem?

The AEMC also stresses that it is seeking evidence-based submissions on the costs and benefits of the rule change proposals, and that raising specific comments early in the process will greatly assist it.

2.4 Submission overview

This submission seeks to address the questions raised by the AEMC and provide evidence wherever possible, given the timeframes provided for making submissions. In particular, it:

- Examines the rule change proposals made by the AER (and the EUC where relevant) and the evidence used to support them, and makes some observations on the problems identified and the evidence relied upon.

- Examines the specific problems identified by the AER (and the EUC where relevant) in respect of each rule change and the specific evidence relied upon. The focus of this submission is on the rule change proposals as they relate to the cost of capital, but it also refers to the other rule change proposals where they raise key issues.

[8] http://www.ret.gov.au/resources/Documents/mcmpr/ToR-COAG23Sept2011.pdf Moreover, the Department of Resources, Energy and Tourism's Annual Procurement Planning Review 2011-12 proposes engaging consultants in the first quarter of calendar year 2012 to examine the effectiveness of the limited merits review appeal regime. FIG members' discussions with policy makers would suggest that work is already underway.

- Draws conclusions in each case on whether:
  - there is a problem;
  - the source of any problem is as identified;
  - the rule change proposals are necessary to address any problem; and
  - other mechanisms might be more effective in addressing any problem.

The FIG notes that some of the AEMC's questions – in particular, the balance between prescription and discretion – are inherently subjective and not particularly amenable to quantitative analysis (e.g. formal cost benefit analysis). The AEMC is, however, experienced in assessing rule changes particularly in respect of electricity, albeit mostly in relation to less material issues. Its decisions appear to recognise these constraints.

The FIG is firmly of the view that some of the judgements these questions raise are best informed by having a clear understanding of the most effective way to regulate monopoly infrastructure (i.e. by focusing on providing incentives consistent with meeting the objective of the laws - the long term interests of consumers). The FIG considered that this was widely accepted and reflected in the laws and rules. The rule change proposals suggest otherwise (see Section 4.2).

2.4.1 Report outline

This report provides the output of our analysis. In particular:

- Section 3 – summarises the rule change proposals and the arguments and evidence provided to support them;
- Section 4 – makes some broad observations on the rule change proposals;
- Section 5 – discusses the rule changes on the process of estimating the cost of capital;
- Section 6 – discusses the rule changes on the cost of debt; and
- Section 7 – discusses the rule changes relating to matters other than the cost of capital; and
- Appendix A – outlines the AER's performance in relation to merits review.

3. Overview of rule change proposals

From the FIG's perspective, the rule change proposals cover:

- The rate of return framework – setting it for electricity and gas networks;
- The cost of debt – removing the existing definition of the debt risk premium from the electricity rules and either increasing the scope of the WACC review to cover the methodology for setting the debt risk premium or replacing the definition; and
- Various proposals for electricity that relate to non-capital costs, including:
  - the capital ("capex") and operating ("opex") expenditure framework, including the process for developing expenditure forecasts;
  - expenditure incentives on electricity networks to spend no more than is necessary and efficient; and
  - streamlining the regulatory determination process, partly to ensure more stakeholder engagement.

3.1 Evidence relied upon by the AER

The AER appears to makes the following key observations in justifying its proposals:

- The AER states that it has *"almost completed"* an *"entire round"* of determinations (under NER chapters 6 and 6A) for electricity Network Service Providers ("NSPs").[9]
- The AER states that it has undertaken an *"internal review"* of the operation of these rules. As a result of that review, the AER concludes that "in some areas the regulatory framework is operating well. Further the AER is continuing to develop its own processes to improve the effectiveness of economic regulation. However, this review has also identified deficiencies in the existing regulatory framework that applies to NSPs. This rule change proposal is designed to address these deficiencies."[10]
- The AER notes the history behind the development of the rules and that the AEMC sought, through the rules, to improve the environment for investment by increasing regulatory clarity and certainty. The AER also notes that, at the time, it argued that the existing regulatory framework was supporting significant levels of transmission investment and that the proposed framework would not deliver effective incentives for investment; would tilt the regulatory balance in favour of the NSPs; and would limit the AER's capacity to respond to the individual circumstances of each NSP.
- The AER states that its subsequent experience applying the framework has reinforced its view that "the regulatory regime inappropriately favours NSPs and consumers are paying more than they should to maintain a reliable and secure power system."[11]
- In the case of the gas rule change proposal, there will be administrative efficiencies achieved by the AER (although it concedes that the same will not be the case in Western Australia) in aligning the rate of return provisions for gas and electricity.

In summary, the AER appears to justify its proposals on the basis that:

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[9] AER, op. cit., September 2011, pages 11 and 1
[10] Ibid., page 1
[11] Ibid, page 4

- it is an appropriate time to assess the rules;
- the AER's assessment is that the rules have deficiencies;
- it always knew this was the case; and
- its subsequent experience demonstrates it.

The AER appears to provide the following general evidence to support its proposals:

- An opinion by Stephen Lloyd SC which argues that there are key aspects of the rules that are susceptible to inefficient investment or bias in favour of NSPs;[12]
- It argues that the prescriptive approach in the electricity rules is significantly different to that adopted in the preceding state-based regulatory regimes and those in other countries (and provides four examples). The AER also argues that it can only amend the electricity distribution businesses' expenditure forecasts to the minimum extent necessary to ensure compliance, and that this particular restriction is unusual; and
- It cites the increases in electricity prices in particular since 2007, and forecasts that those increases are expected to continue along with the increasing community concern about those price increases.[13] The AER attributes *"a significant proportion of the more recent rises"…"to increases in regulated network charges."* It notes there are various understandable drivers for the increases in network charges, but concludes that these drivers *"do not fully account for the level of observed increases."*[14]

In summary, the AER's general evidence is comprised of a recent legal opinion, some evidence that the degree of prescription in the electricity rules is unusual and evidence of higher electricity prices, which it believes is largely driven in part by unnecessarily high network charges. In other words, network charges are too high and this is due to inappropriate regulation, which is unduly constraining the AER's discretion.

The FIG notes that there is limited, if any, evidence to support the gas proposals. Moreover, it notes that while there has been a rise in gas prices in certain states (e.g. WA and Qld) and there is speculation of pending gas price rises (e.g. Qld), there is limited evidence that:

- this is due to material rises in network charges in other states; or that the gas rules; or
- its application by regulators, has led to any undue increases.

The AER appears to provide the following specific evidence to support its proposals:

- The AER states that under the current electricity framework, there have been significant increases in capital and operating expenditure in final determinations. In particular, it notes that on average compared to the previous regulatory period:
    - capex forecasts were 84% higher than actual capex;
    - capex allowances were 64% higher than actual capex; and
    - opex forecasts were 34% higher than actual opex.

[12] Stephen Lloyd SC, Memorandum of Advice: In the Matter of the Australian Energy Regulator's Rule Change Requests to the Australian Energy Market Commission concerning Chapters 6, 6A, 10 and11 of the National Electricity Rules and Part 9 of the National Gas Rules 2008, 21 September 2011

[13] The AER cites the Garnaut Climate Change Review, the NSW Electricity network and prices inquiry and IPART.

[14] AER, op. cit., National Electricity Rules, September 2011, page 5-6

- The AER argues in relation to expenditure allowances generally that it "is not confident that this represents efficient or necessary expenditure."[15]

- The AER presents evidence that some electricity businesses have been spending in excess of their capex allowances (some of the NSPs in NSW and Queensland).

- The AER shows that there have been significant increases in the allowance for the cost of debt under the current electricity rules compared to the previous rules. The difference would appear to be in the order of two percentage points.

- Finally, the AER shows that the current electricity rules have supported significant increases in NSPs' revenues in all states except Victoria.[16]

This more specific evidence is addressed in the sections of this report that focus on the specific rule change proposals.

3.2 Evidence relied upon by the EUC

The EUC's proposal focuses on the *"calculation"* of the cost of debt.[17] It observes that:

- "Rising network charges resulting from higher capital expenditure and higher regulated rate of returns have been the main factors. The Committee have examined this and concluded that failures in the design and conduct of regulation have played a significant part in this outcome. It has delivered excessive over-investment and windfall gains for the owners of the regulated network service providers (NSPs)."[18]

- The NSW Government made a 'return' on its investment in the NSPs of over 29% in 2010; three times higher than what the AER considers to be reasonable, although this is an 'all-up return' including tax equivalents and benefits from the debt margin it collects.

- The "evidence is that the return on debt outcomes that have been delivered so far both in electricity and gas do not reflect a lack of regulatory discretion. Accordingly, to be assured of appropriate outcomes in this area the Committee considers that the methodology for the return on debt should be specified in the Rules."[19]

The key evidence the EUC appears to rely on to support its proposals is as follows:

- "There is compelling evidence the privately owned electricity NSPs – who constitute around 25% of the industry by assets have a cost of debt that is around 250 basis points lower than the return on debt that they have been allowed to charge users. For the remaining 75% of the industry – government owned NSPs whose debt is provided by jurisdictional governments – this gap rises to around 350 basis points."[20]

In summary, the EUC believes that:

- the allowed cost of debt is substantially in excess of the businesses' 'actual' cost of debt;

- the AER could have addressed this problem but has failed to do so; and

- a prescriptive approach is needed to ensure that the AER addresses it.

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[15] Ibid., page 14
[16] Ibid., page 8.
[17] EUC, op. cit., 17 October 2011, page 5
[18] Ibid., page 5
[19] Ibid., page 7
[20] Ibid., page 5

In other words, network charges are too high and this is because of ineffective regulation, which is the result of the AER failing to use the discretion at its disposal.

4. Observations on the rule change proposals

In this section the FIG makes some broad observations on the arguments made and the evidence provided to support the rule change proposals, including the problem identified and the nature of evidence used (or omitted). This section covers the general proposals, whereas specific rule changes proposals are discussed in subsequent sections.

In particular, it focuses on the conceptual and empirical evidence provided to support two key contentions made by the AER:

- that its discretion under the electricity rules is unduly constrained; and
- that this is manifesting in electricity network charges that are higher than necessary.

In summary, the FIG believes that the AER has erred in its characterisation of:

- what is happening to electricity network charges, primarily because it has taken a short term view, which does not recognise differences in the outcomes in particular locations. In other words, the 'problem' in terms of the outcomes observed (i.e. unduly high network charges) is debatable; and
- the regulatory 'problem' that has led to this outcome being driven by the undue constraints on the AER's discretion. The FIG is not convinced that, as a general rule, the AER's discretion is unduly constrained. Moreover, to the extent there are problems associated with regulation, they seem to be more a function of the AER's approach to regulation and the resulting use of the discretion it has, rather than any lack of it.

The FIG submits that the AEMC should consider the rule change proposals with the following principles in mind:

- primary regard should be paid to investment certainty (i.e. first 'do no harm'), particularly given the short period for which the rules have been in place;
- where there is regulatory discretion, accountability for the exercise of that discretion should not be reduced;
- if wider discretion is to be provided, it should be accompanied by more rather than less accountability, and must be underpinned by reasonable confidence that this discretion will be exercised fairly and effectively;
- rule change proposals should reflect the emerging challenges the industry is facing, not challenges it has already met (i.e. achieving the major efficiency benefits of reform); and
- if rule changes are to be made, they should be towards greater reliance on incentives; not away from it, as is currently proposed.

This section provides the evidence to support the FIG's broad views. It does this by making some observations relating to:

- the significance of the proposals;
- what they imply for the balance between regulatory discretion and accountability, including the implications for gas (i.e. whether any change is required);
- the timing of the proposals;

- how to assess the effectiveness of the regulatory regime;
- the comparison with other regulatory regimes;
- the AER's integrated package of proposals; and
- what the proposals suggest about the regard paid to regulatory certainty and the reliance on incentives.

4.1 The significance of the rule change proposals

The rule change proposals are alleged to be significant. According to the proponents, if implemented, they are likely to have a significant impact on the regulatory process and a material impact on the outcomes it produces (e.g. for network charges).[21]

This is evident from the proponents' claims; in particular on the following issues:

- The AER's claims about the regulatory framework. The AER's Chairman and the AER can only find "some" areas of the regulatory framework that are operating well. Moreover, the areas it does find that are operating well do not relate to the businesses' performance.[22] This view appears to:
  - reflect the term of the AER's outlook (see Section 4.3); and
  - be contrary to the evidence (see Section 4.4).
- The impact on the regulatory process. It is evident from the AER's proposals and the AEMC's questions (see Section 2.3.1), that the level of discretion and accountability are key variables in play. The AER believes, in respect of electricity, that its discretion is unduly and materially constrained and would like that discretion increased. The FIG believes the evidence is at best mixed (see Section 4.2.2 and Section 7 in particular) and the EUC disagrees with the AER at least in respect of estimating the cost of debt for electricity networks (see Section 6).
- The impact on network charges that the proponents believe the AER's proposals will have. For example, as the cost of debt proposal indicates (as Section 6 examines). The AER is not specific about the impact its other proposals (e.g. more discretion in setting capex) will have on electricity network charges, but it believes the impact on network charges will provide benefits to consumers.

It is worth noting, however, the AER also seems to argue that its proposals are modest: *"The relatively incremental nature of the proposed amendments will minimise many of the risks for NSPs associated with regulatory change and uncertainty."*[23] Section 4.7 addresses the issues of changing the rules and regulatory uncertainty.

4.2 Regulatory discretion and accountability

The AER's proposals are fundamental in nature from the FIG's perspective because they relate to the level of discretion and accountability the regulator has in respect of capex, opex

[21] The FIG would argue that they might be less significant than the AER in particular asserts for a number of reasons discussed below, including that they do not address the key problem.
[22] Andrew Reeves, AER Chairman, Letter to John Pierce: Rule change proposal – energy network regulation reform, 29 September 2011. AER, op. cit., September 2011, page 1. Elsewhere (page 11), it states that "many" aspects of the existing regulatory framework are operating well, but the examples highlighted relate to key process requirements and areas where it is developing new techniques around benchmarking.
[23] AER, op. cit., National Electricity Rules, September 2011, page 23

and the cost of capital. In other words, the proposals affect all the incremental costs of the businesses, and a substantial proportion of their 'fixed' costs (i.e. capital related).

The AER's proposals for electricity would increase its discretion whilst significantly reducing its accountability. In gas, they would technically provide increased prescription, but further reduce accountability. For example, the AER's proposals would reduce the regulator's accountability to deliver rates of return which accord with prevailing conditions in financial markets and with the risks to which service providers are exposed in their provision of services.

As the FIG notes in Section 2.3, there may also be changes to the relevant laws that may remove or reduce the ability of stakeholders to seek merits review on the AER's decisions. Change to these laws is properly a matter for the various Parliaments that enact them.

Under the current regulatory framework, the right to appeal is defined by reference to an action taken under the rules. In each case, this is in effect a regulatory determination. The removal of a regulatory decision from within the scope of a regulatory determination to outside that scope by way of a rule change will have the effect of amending the merits review rights provided under the laws.

A by-product of the AER's proposal would therefore be that setting the cost of capital is no longer a reviewable decision. In effect, this involves the AER stepping into areas that are properly the role of policy makers, as it would impact on the application of the law.

The current arrangements were, however, introduced after an extensive period of debate on the choice of an appropriate review scheme in both gas and electricity.

It is worth noting that merits review arrangements under the electricity and gas laws are just an example of one of the common features of administrative law in Australia, and are not unusual. For example, the Administrative Appeals Tribunal ("AAT") does not have a general power to review decisions made under Commonwealth legislation, and it can only review a decision if an Act or other legislative instrument provides specifically that the decision is subject to review by the AAT. However, as at 13 March 2010, approximately 450 Commonwealth legislative instruments were subject to the AAT's jurisdiction. Almost 2400 decisions made under those instruments were reviewable.

Merits review is also not unusual to Australia. Prof. David Round, current member of the Australian Competition Tribunal has noted that "*Very few countries do not have some form of merits review for regulators' decisions*."[24] Merits review not only protects the rights of citizens, but has a broader, long-term objective of improving the quality and consistency of the decisions of primary decision-makers.[25]

The FIG is therefore highly concerned with this aspect of the AER's proposal.

The reason for the FIG's particular concern is self-evident. In short, as Section 4.2.2 shows, the AER's record in applying its discretion in respect of the cost of capital has been particularly poor. Absent merits review rights, a number of issues which the AER conceded were errors would not have been addressed, and a number of issues on which the AER were shown to have made errors would not have been rectified. Uncorrected, these errors would have had a material impacts on the cost of capital (Refer to Section 5.4.1), and are highly likely to have impacted on promoting efficient investment.

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[24] Prof. David Round, 'The merits of merits review process for regulatory decisions: Why New Zealand should have it', presented at the conference 'Contemporary issues in Regulatory Theory and Practice, Wellington, 22 March 2005, page 24

[25] Sir Anthony Mason, "Delivering administrative justice: looking back with pride, moving forward with concern", a paper delivered to the Australian Institute of Administrative Law Forum, 22 July 2010, page 8

The FIG urges the AEMC to consider whether:

- it is appropriate for the AEMC to make rule changes that, as a consequence, would remove an merits review right that is currently provided for in the laws (and so effectively amending those laws) without prior consideration of that consequence by the relevant Parliaments; or

- it should assess the rule changes in the context of a law that both has and does not have merits review provisions (i.e. would they be consistent with the long term interests of consumers in both scenarios), whilst referring the consequential impact on merits review rights to Government.

As a general rule, the FIG is concerned about any change in the mix between discretion and accountability. It is not opposed to wider discretion *per se*, provided it comes within the appropriate guidance and constraints. Without an increase in accountability, wider discretion can only increase the risk associated with investing in regulated energy networks, because it increases the risk that the discretion provided will be applied inappropriately. This is a significant risk, as the evidence in Section 4.2.2 shows.

Putting this general rule aside, there are more practical questions surrounding:

- How much discretion is enough?

- How well has the AER has executed the discretion it has (and its duties more broadly)?

- Is more discretion required to address the problems identified?

4.2.1 How much discretion is enough?

The issue of how much discretion is enough is inevitably a matter of judgement, and must be viewed in the context of the broader accountability framework. As Section 2.4 discusses, in the FIG's view, this judgment is best informed by having a clear understanding of the most effective way to regulate monopoly infrastructure (i.e. it depends on what is the 'purpose' of regulation).

In the FIG's view a regulator will always seek to increase its discretion if its core belief is that its role is to 'decide' what the efficient cost of providing network services is in any particular circumstance, simply because this cannot be objectively determined. In this regard, there is some evidence from the AER's performance (see Section 4.2.2) and its proposals (see Section 7) that it increasingly sees its role in this way.

The current level of discretion might however be sufficient if the regulator's proper role is to provide a framework in which the businesses reveal efficient costs, through the incentives that framework provides.

4.2.2 How well has the AER executed its discretion?

There is a large body of evidence which demonstrates how well the AER has applied its discretion. This evidence comes from the AER's performance in the merits appeals that stakeholders have raised since it started regulating. It is important to note that while the level of discretion might influence the number of appeals (i.e. as the AER has argued, establish a too *"low hurdle"*[26]), it cannot account for the results of those appeals.

Appendix A provides the relevant evidence in some detail.

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[26] Andrew Reeves, Chairman, Australian Energy Regulator, 'Finding the balance – the rules, prices and network investment', Energy Users Association of Australia: Energy price and market update seminar, 20 June 2011, page 9

The evidence shows that:

- most of the appeals have related to matters regarding the cost of capital;
- there have been relatively few appeals on issues associated with expenditure benchmarks (which Section 7 discusses in more detail);
- the AER's overall record in having its decisions supported by the Australian Competition Tribunal ("ACT") is, on any objective measure, poor;
- the AER's record in relation to appeals on the cost of capital has been particularly poor; and
- in relation to the gas rules, while the regulator technically has unlimited discretion in relation to the determination of the rate of return (subject importantly to the market test), the few decisions made under the rules to date have resulted in the regulators relying significantly on decisions made under the electricity rules as precedent to substantiate decisions made under the gas rules.

Table 2 provides a summary of the outcomes.

While counting the outcomes of appeals is more complex than it appears (for the reasons Appendix A highlights), the FIG's analysis suggests that the AER's decisions have only been supported by the ACT about 40% of the time. Moreover, the AER's record on the generally more material issues (i.e. cost of capital, opex/capex, RAB) is worse with its decisions being supported by the ACT about 33% of the time.

Table 2: Matters decided in favour of network service providers (including matters conceded by the AER)

	Cost of capital	RAB	Opex/ Capex	Other	Total
Number of matters disputed	16	3	6	16	41
Number of matters decided in favour of NSPs / conceded by AER	11	2	4	8	25
Proportion of matters decided in favour of NSPs / conceded by AER	*69%*	*67%*	*67%*	*50%*	*61%*

Source: FIG analysis

This evidence suggests that the AER:

- has consistently overstepped the bounds of, or misapplied, its discretion in making decisions on the cost of capital and other matters; and
- has perhaps been reluctant to test the bounds of its discretion in making decisions on expenditure benchmarks. This evidence would seem to be inconsistent with the AER's view that its discretion in respect of expenditure benchmarks is unduly constrained as it does not appear to have been rigorously tested (see Section 7).

The AER argues that businesses have the ability to 'cherry pick' aspects of decisions, with the implication being that the statistics of the appeal results are skewed against it. However, the AER has at its disposal in the current electricity law a mechanism to broaden the scope of any appeal brought by an NSP to balance the process.[27] It has not used that mechanism.

[27] Refer to Section 5.4.1.

While the decision to seek a review is one for an NSP and this might explain the number of appeals; it cannot explain why the ACT has so often found errors in the AER's decisions (see Section 5).

The FIG notes that it is generally expected that, despite the inherent difficulty of regulatory type roles, such statutory authorities should not regularly lose litigation on their decisions.[28]

The FIG also notes that understanding the AER's performance in respect of merits review does not appear to have been part of the AER's internal review, nor does it appear to be one of its strategic priorities.[29] By contrast, the AER does appear to be interested in removing the capacity for merits review.[30]

In respect of the evidence provided by the AER, the FIG notes that the AER's theoretical evidence is based on the legal opinion of Stephen Lloyd SC, dated 21 September 2011. It is surprising that the AER has not tabled any legal opinion sought or provided at the time it made the relevant decisions (e.g. at the time it first formed the view that its discretion in key areas – such as in setting expenditure benchmarks - was unduly constrained). Such evidence could, for example, have included case studies of what the AER would have allowed in an unconstrained world and what it was forced to allow under its interpretation of the rules. It has tendered no such evidence despite apparently predicting the situation would arise, nor any evidence that it has articulated these concerns in its determinations.[31]

The opinion provided by Stephen Lloyd SC appears not to have considered *"any fact situation but by reference to the materials noted."*[32] In other words, it does not appear to have considered the facts about the AER's performance.

The other evidence the AER provides on discretion generally relates to the unusual nature of the regulatory regime (see Section 4.5). The specific evidence it provides is addressed in subsequent sections.

4.3 The timing of the rule change proposals

The AER appears to believe that the fact that it has almost completed an *"entire round"* of determinations makes it an appropriate point at which to assess the merits of some aspects (i.e. the revenue setting aspects) of the regulatory regime and to propose rule changes.

The FIG has two key concerns with the AER's rationale for the timing of its proposals:

- it is not obvious that this rationale provides a complete picture; but, even if it did,
- it reflects a relatively short term regulatory approach, which is fundamentally at odds with the nature of the industry and assets the AER is regulating.

The FIG doubts that the AER's rationale can be taken at face value for the following reasons:

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[28] For example, the ACCC's 2009-10 Annual Report (which covers the AER) noted that there were four judicial review proceedings against the ACCC, all of which were resolved in its favour. The ACCC 2010-11 report notes that none of the ACCC's regulatory decisions relating to telecommunications access, water regulation, transport or fuel were reviewed in 2010-11. See ACCC and AER, Annual Reports 2010 and 2011. ASIC's performance has been heavily criticised because of its failure on several key legal actions (despite success on the vast majority it raised). Its Annual Reports examine the situation in detail. See ASIC, Annual Report, 2009-10 and 2010-11; AFR Opinion, 'Criticism of ASIC litigation cases is overdone', 20 January 2011, page 47. The Australian Taxation Office displays a similar degree of transparency (and success). See Commissioner of Taxation, Annual Report 2010-11

[29] AER, AER Strategic Priorities and Work Program 2011-12, 2011

[30] Andrew Reeves, Chairman, AER, 'Finding the balance – the rules, prices and network investment', Energy Users Association of Australia: Energy price and market update seminar, 20 June 2011, page 9

[31] This is all the more revealing because this is precisely the evidence standard that energy regulators have applied to the businesses (e.g. in regard to the original circumstances involved in outsourcing to 'related parties').

[32] Stephen Lloyd SC, op. cit., 21 September 2011, page 2

- The AER's evidence in respect of the outcomes observed commences with noting the increases in electricity prices in particular since 2007, forecasts that those increases are expected to continue and the associated community concern (see Section 3.1).

- The AER makes no attempt to analyse what is happening to electricity networks and disaggregate the cyclical impacts (i.e. with the investment cycle) from any impacts that might be driven by other factors (e.g. location and underlying efficiency). The FIG discusses these issues in Section 4.4.1 and provides the relevant evidence.

- The AER makes no mention of what has been happening to gas network charges. This may be because they have not been increasing materially in recent times. The FIG discusses this issue in Section 4.4.3 and provides the relevant evidence.

- The AER notes that it has undertaken an internal review of the operation of these aspects of the rules and, amongst other things, finds that it needs to *"continually develop its own processes to improve the effectiveness of economic regulation."*[33] The FIG welcomes the AER undertaking such reviews and its commitment to improving its performance (although the FIG maintains that major rule changes would be premature at this time). The FIG also believes that:

    - a more open and transparent review process would be beneficial for all parties;

    - if such a review is to be undertaken, it should not just focus on revenue setting.[34] It should cover price and service levels, and should also take a longer term view of the regime's performance, so the outcomes in the current period are viewed in the appropriate context (as Section 4.4 does); and

    - If such a review is to be undertaken, it should more transparently address the AER's performance (e.g. in respect of merits review, as Section 4.2 examines). In short, the FIG has concerns about whether it is appropriate for the AER to seek significant rule changes, when there does not appear to have been an objective assessment of the AER's execution of those rules.

Taking the AER's rationale as indicating a short term perspective is perhaps more concerning. This is because:

- it suggests that the AER interprets the long term interests of consumers first and foremost, within the context of its five year decision making duties; and

- such a perspective appears to result in the AER bringing a misguided view of:

    - what constitutes relevant evidence when assessing the effectiveness of the rules (including resulting in it making all the errors outline above); and

    - the performance of those rules.

This view appears to lead the AER to conclude that the regulatory regime is not particularly effective, as Section 3.1 illustrates. More importantly, it leads to the AER proposing significant rule changes within three to six years of the electricity and gas regulatory instruments being established, and after a process to establish the new instruments which itself lasted at least three years in the case of electricity.[35]

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[33] AER, op. cit., National Electricity Rules, September 2011, page 11

[34] This approach is rather inconsistent with the approach adopted in the United Kingdom. See Section 4.5.1. Ofgem's performance was recently the subject of an inquiry by the National Audit Office, at the request of a parliamentary committee.

[35] The current rules and law commenced operation for electricity on 1 July 2005 and for gas on 1 July 2008.

If the AER's rule changes proposals are accepted, the outcome would be that the rules change with the life of a typical five year regulatory period and the period for which WACC parameters were set when the rules were established, according to the AER, to provide greater investment certainty.[36]

4.4 Assessing the effectiveness of the regulatory regime

The FIG would submit that a longer term perspective is more appropriate when assessing the performance of regulatory regimes.[37] This is partly because it enables the analysis to separate the cyclical impact of investment needs on charges, from what may be more systematic impacts, including any deficiencies in the regulatory regime.

Moreover, when such a perspective is taken, a very different picture to that presented by the AER emerges.

As the following sections of our submission indicates:

- in respect of increasing electricity prices, it is evident that network charges are not responsible for the increases in some jurisdictions. Electricity network charges have not been increasing materially everywhere, which is what would be expected if the rules were indeed the source of the problem. Where network charges have been increasing materially (i.e. in Qld and NSW), it has been recognised that state based reliability standards (set by governments) have been a primary driver. Both states are now reviewing these standards;[38]

- over the longer term, the performance of some businesses in reducing network charges has been, on any measure, impressive. Moreover, this performance appears to be have been underwritten by substantial efficiency improvements; and

- in respect of gas network charges there does not appear to be a significant price 'problem', yet the gas network sector is being captured by the rule change proposals relating to the cost of capital.

In short, the evidence suggests that higher network charges are not systematically driving higher electricity prices, and that deficiencies in the rules are not in fact causing higher network charges. This challenges the basis of the AER's call for wider discretion in relation to its regulation of electricity businesses.

The evidence also shows that in the privately owned states where electricity network charges have decreased significantly in the past fifteen years, network charges are likely to increase over the medium term as they respond to the need to replace aging assets and the new pressures they now face (e.g. growing peak demand, but slower growing total volume, the need to integrate renewable into the network and make the networks smarter). These are pressures that the AEMC has recognised (see Sections 4.5 and 4.6) and regulation needs to more fully recognise.

4.4.1 Electricity network charges

The evidence in respect of electricity network charges is reflected in work undertaken by Ernst & Young for the Victorian network businesses,[39] and for ESTA Utilities.[40] The FIG

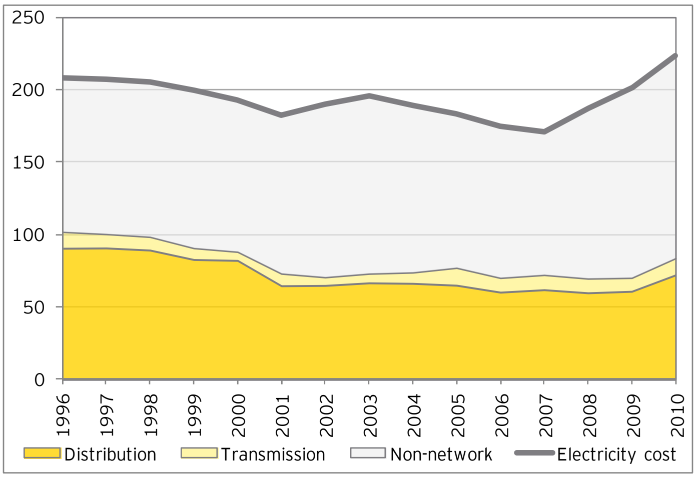
[36] Andrew Reeves, Chairman, AER, 'Finding the balance – the rules, prices and network investment', Energy Users Association of Australia: Energy price and market update seminar, 20 June 2011, page 3
[37] Notwithstanding the AER's views that the rules have changed significantly, which Section 4.5 addresses.
[38] Premier of NSW, Media Release, Premier announces three point plan to ease power price increase, 14 April 2011. See also http://www.energex.com.au/media-centre/media-releases/releases/2011/energex-welcomes-somerville-review-announcement.
[39] Ernst & Young, Victorian Domestic Electricity Prices: The contribution of network costs, September 2011.
[40] Ernst & Young, South Australian Domestic Electricity Prices: The contribution of network costs, December 2011.

understands that this work may be submitted to the AEMC as part of the asset companies' responses.

The work undertaken by Ernst & Young shows:

- In Victoria:
  - Electricity prices and typical bills for the typical domestic customer have increased by 7% in real terms from 1996 to 2010. In particular, prices have increased by 30% since 2007, following a decrease of 18% in real terms between 1996 and 2007. Figure 1 illustrates what has happened to the relevant components of Victorian electricity prices in this period.

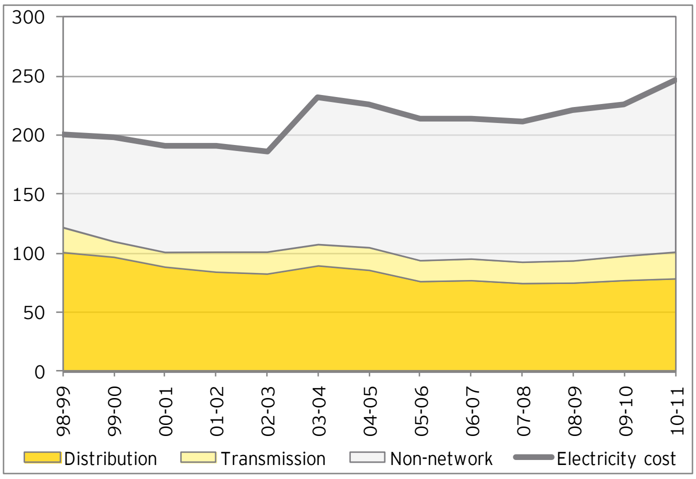
Figure 1 Victoria electricity costs by component 1996 to 2010 ($ per MWh, real 2010)



Source: Ernst & Young

  - Network costs per mega-watt hour have decreased by 18% in real terms between 1996 and 2010. This after including the costs as a result of the previous Victorian Government's mandated roll out of advanced metering infrastructure (AMI).
  - In the absence of a roll out of AMI, the best estimate of network costs would mean the decrease in network costs between 1996 and 2010 per mega-watt would be closer to 35% in real terms.
  - The costs of other 'non-network' costs (which includes wholesale energy and retailers' costs) increased by 31% in real terms between 1996 and 2010.
  - Victorian domestic electricity customers have received benefits in addition to those benefits that one might reasonably expect to arise from increasing volumes (i.e. increasing total costs but declining per unit costs). In other words, total network costs for Victorian domestic electricity customers have fallen despite increasing volumes.
- In South Australia:
  - Electricity prices and typical bills for the typical domestic customer increased by 23% in real terms from 1998-99 to 2010-11. However, since 2003-04, domestic electricity prices only increased by 6% in real terms. This followed a more significant increase in domestic electricity prices of 16% in real terms between 1998-99 and 2003-04.

Figure 2 South Australian electricity costs by component 1998-99 to 2010-11 ($ per MWh, real 2010)



Source: Ernst & Young

- Network costs per mega-watt hour have decreased by 17% in real terms between 1998-99 and 2010-11.

- In contrast, non-network costs increased by 86% in real terms between 1998-99 and 2010-11.

- Further, South Australian domestic electricity customers also received benefits in addition to those benefits that one might reasonably expect to arise from increasing volumes (i.e. increasing total costs but declining per unit costs). As in Victoria, total network costs for South Australian domestic electricity customers decreased despite increasing volumes.

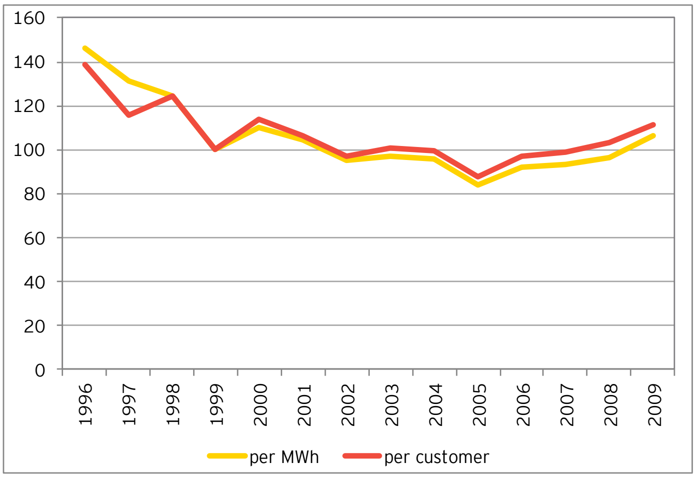
4.4.2 Private distribution businesses' cost performance

In general, there is limited readily accessible information on network costs to allow analysis of the performance of electricity network businesses in Australia, particularly under the existing rules. This is simply because the industry has not yet been through a full price review cycle.

Two exceptions are Victoria and South Australia where the ESC and ESCOSA (the predecessor to the AER with regard to regulation of distribution businesses) published annual reports on the comparative performance of electricity distribution businesses. In the case of Victoria, the AER has continued these performance reports.

The information shows that total average operating expenditure of the Victorian electricity distributors (including domestic and business) decreased by 27% in real terms on a per mega-watt hour basis from 1996 (i.e. privatisation) to 2009.

Figure 3 Victoria electricity distribution operating costs 1996 to 2009 (Real 2010 index, 1999=100)



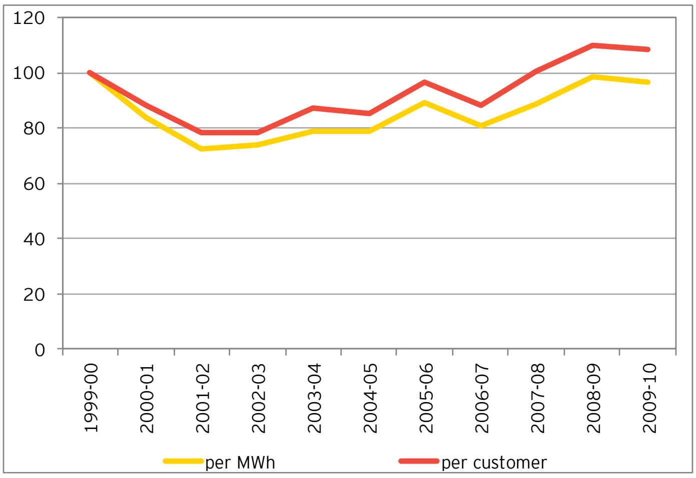
Source: AER, ESC, ESAA

The FIG understands that the increase in operating costs since 2005 reflects:

- changes in compliance requirements (meeting legislative and regulatory requirements under Electricity Safety (Network Assets) Regulations 1999,Terrorism (Community Protection) Act 2003);
- ESC also made changes to the service standards regime, adding a new incentive called the Guaranteed Service Level payments scheme (i.e. for worse-served customers). The DBs would inevitably have borne additional opex for this;
- increasing unit labour rates; and
- declining rates of productivity improvement.

In South Australia, average operating expenditure of the electricity distributor (including domestic and business) decreased by 3% in real terms since privatisation to 2009-10, on a per mega-watt hours basis.

Figure 4 South Australian electricity distribution operating costs 1999 to 2010 (Real 2010 index, 1999=100)



Source: ESCOSA, ESAA

Per unit operating expenditure decreased by 27% in the three years following privatisation of the distribution network in South Australia (i.e. to 2001-02). Following this, operating expenditure gradually increased reflecting:

- ETSA Utilities (the South Australian distributor) assuming new responsibilities in providing metering services to particular customers in January 2003 following the introduction of Full Retail Contestability to domestic customers;

- a requirement by the regulator for ETSA Utilities to investigate "*various initiatives for promoting demand management in South Australia*";[41] and

- Increased emergency response costs resulting from extreme weather events (e.g. storms in August 2005, heatwave in January 2006).

In short, it shows that the Victorian and South Australian distributors have delivered substantial efficiency improvements, whilst delivering higher service standards over time.

Section 7.2 suggests their performance compared to forecasts was also strong and far superior to the examples relied upon by the AER.

4.4.3 Gas prices and network charges

The AER's analysis makes no mention of gas prices and network charges, although it has always had some aspects of the regime that the AER is also seeking to change. The FIG has not had the time to conduct a detailed analysis in preparing this submission, but it understands that while retail gas prices may have increased significantly in recent times, there is limited evidence to suggest networks are responsible for much of this increase (perhaps outside of Brisbane where significant investment is occurring to upgrade the network).[42]

The FIG would submit that the AER's definition of the problem, in terms of the outcomes it is seeking to prevent through its proposals, is inaccurate and incomplete. This arises because of the AER's short term outlook. The evidence draws into question whether regulation can account for the problems the AER has identified, simply because the outcomes the AER is seeking to prevent do not seem to be relevant to all regulated businesses. It implies that the main driver for the rule change proposals is what has been happening to retail electricity prices.

4.5 Comparisons with other regulatory regimes

The AER makes a number of comparisons across regulatory regimes, both those that existed in Australian prior to the advent of the current rules and those that exist in other countries. As a general rule, caution should be exercised in making those comparisons, unless the entire regime is viewed in its context.

The FIG would dispute just how different the rules are and whether the AER is as constrained as it argues (see Sections 4.2 and 4.3) compared to the regulatory regime implemented by its predecessors. In addition, the FIG would note that:

- Distribution charges in Victoria fell significantly under the previous regulatory regime. That regulatory regime would appear to have had at least three features of the electricity rules that have been identified by the AER as needing reform.[43] The courts

[41] ESCOSA, 2005-2010 Electricity Price Determination: Part A – Statement of Reasons, April 2005, page 100

[42] In Victoria, the FIG understands that average domestic gas prices have increased by approximately 24% in real terms (on a per gigajoule basis) between 1998 and 2010, but almost all that increase has occurred since 2007. Gas network costs increased by an estimated 11% in real terms between 1998 and 2010, or at around 0.9% per year (compounded annual growth rate).

[43] The only feature of the NER that the AER would like to change that was less apparent in the Victorian regulatory framework, were the constraints around reducing expenditure allowances. According to the Victorian Essential Services Commission, however, this does not appear to have removed the distributors' incentive to overstate their forecasts. Indeed, in its last Electricity Price Determination Review, the Victorian Essential Services Commission stated: *"In arriving at its Final Decision, the Commission has also reflected on the experience and behaviour of the*

found that the regime provided the regulator with *"wide discretion"*[44], but that did not appear to reduce the number of appeals that arose.

- Network charges in NSW and particularly Queensland were increasing significantly under their previous regulatory regime as well.

- Gas networks were regulated under the 'propose-respond' model for a substantial period of time, which is the basic model the AER has identified problems with as providing too much discretion.[45] Moreover, this model would appear to have three of the four problems identified.[46] There were also no appeals under this regime after 2004.

The FIG's view would appear to accord with that of Prof. Tom Parry, former executive chairman of IPART. He has argued that the *"basic model is essentially the same"* as has been used previously *"…But the way in which the regulator and some of the businesses now engage with the model is very different from the relatively simple model that worked for nearly 15 years."*[47]

In explaining why this was the case, he noted that *"Most importantly, the regulatory model was based on incentives."* He also noted that regulation *"is still based on the building blocks, but many of the other key features have changed substantially. Regulation today is far from light-handed; the data requirements on the businesses and the burden on the regulator are very much greater, more detailed and much more intrusive than nearly 20 years ago. The amount of material submitted as part of a regulatory submission is vast. The regulator is now attempting to second-guess management in many areas of the business. Has it led to the regulator having a better understanding of the businesses and a better handle on efficient costs? I doubt it."*

Parry also noted that appeals to the regulator's decisions have become standard. He concludes, however, that: *"most important, the fundamental role of incentives appears to be missing from regulation today. The regulator does not appear to accept that a business will drive all of its costs, including efficient financing costs, so that customers can share in those benefits."*

4.5.1 Evolution of the regulatory regime

The FIG would also remind the AEMC that the broader regulatory regime that has existed and exists in Australian and the UK was a response to a recognition that better performance (in terms of service and cost) could be delivered from energy (and other) network industries through industry reform and more effective (i.e. incentive based) regulation.

This industry reform in Australia has largely been successful in delivering efficiency improvements (see Section 4.4).

The energy industry is, however, now facing a different set of challenges (as the AEMC's strategic priorities recognise).[48] This was also recognised in the changes to the rules that

distributors in response to the incentives under the regulatory framework. This includes recognising the incentive the distributors have to over-estimate their expenditure at the time of the price review to maximise their revenue requirement." Victorian Essential Services Commission, Electricity Distribution Price Review: Final Decision 2006-2011, October 2011, page 257. Nor does it appear to have reduced the degree to which the regulator is obliged to get into detail. The ESC's amended decision covered 755 pages and involved numerous appeals.

[44] TXU Electricity Ltd v Office of the Regulator-General and Ors, [2001] VSC 153, Revised 14 June 2001, Para 217

[45] Australian Energy Regulator, State of the Energy Market 2010, 2010, p 6

[46] The only exception is the roll-in of capex. Under the National Gas Rules, the AER has an *ex post* authority to assess capex before it is included in the roll forward of the capital base (called "conforming capex").

[47] Prof. Tom Parry, 'Lawyers' picnic drives up the cost of electricity', The Australian, 29 June 2011, page 14

[48] AEMC, Strategic priorities for energy market development–2011, 20 October 2011

the AEMC introduced and it has also been recognised in the reforms introduced in the UK regulatory system.[49]

The AER's proposals compare rather poorly to the approach adopted in those two processes, as they seem to focus solely on what can be done to reduce network charges and imply that investment is no longer a high priority, as was recognised in the long process when the rules were established.

4.6 The AER's integrated package of proposals

The AER states that its rule change proposals should be considered to be an *"integrated package to address the deficiencies identified…."*[50]

The FIG is uncertain about what this means. For example, it may mean that the AER would like to see the rule change proposals adopted in their entirety and that any partial adoption may lessen the effectiveness of the remaining proposals. Alternatively, it may mean that the proposals are integrated to deliver particular outcomes in respect of the AER's discretion and lower network charges.

The FIG makes the following observations in respect of the integrated nature of the package:

- the AER is proposing to harmonise across gas and electricity in respect of how the rate of return is determined;
- the AER is not proposing to harmonise across gas and electricity in respect of how capex and opex expenditure benchmarks are set; and
- the AER is not proposing to harmonise across gas and electricity in respect of how capex overspend is treated.

These inconsistencies might be a function of the fact that:

- there does not appear to have been a major 'problem' in the gas industry; and
- there has not been a particular problem in the gas sector in applying the *ex post* regime, as there have been very few instances of material over-spending.[51]

This suggests that the argument for consistency is being applied selectively and should be treated with caution. The AER proposals would seem to be in conflict with it claiming that the savings in administrative costs is one key benefit of its proposals.[52]

4.7 The importance of regulatory certainty

The FIG understands the AEMC is bound to consider rule changes in the context of whether they meet the relevant electricity and gas objectives. We note, however, that the AEMC explicitly recognises the importance of investment certainty. In particular, it has identified three strategic priorities for energy development in 2011. The first of these is to *"help ensure that the environment for investment is as predictable as possible."*[53]

[49] Refer to RPI-X@20 review process undertaken by Ofgem in establishing the RIIO model for energy network regulation.
[50] AER, Economic regulation of transmission and distribution network service providers: AER's proposed changes to the National Electricity Rules, September 2011, page 18
[51] Although the FIG has significant reservations with *ex post* reviews of capex, as Section 7 discusses.
[52] The FIG would submit that administrative costs are unlikely to be particularly material when compared to the benefits of applying regulation more effectively.
[53] AEMC, Strategic priorities for energy market development – 2011, 20 October 2011, page 1

The FIG acknowledges the AEMC's explicit recognition that *"Predictability or regulatory and market environments greatly influences investment efficiency."*

The FIG made much the same points in its submission on the AER's first WACC review. More specifically, the FIG stated then that:

"The FIG believes that setting a regulated cost of capital must ultimately be guided by commercial and practical considerations, as this is the perspective that investors will take when making investment decisions, as it believes has been recognised in the National Gas Law and the National Electricity Law. Failure to do so will result in much-needed capital for energy network investment being shifted to other investment opportunities."[54]

More broadly, the FIG went on to state that:

"Investor confidence in long lived assets requires stability, consistency and predictability in regulatory decision making."[55]

The FIG posits that when considering the rule change proposals, the AEMC should give primary regard to providing certainty consistent with fostering investment in network infrastructure assets.

[54] FIG, Submission to the AER's WACC parameter review: The investor perspective: January 2009, page 1
[55] FIG, Submission to the AER's WACC parameter review: The investor perspective: January 2009, page 2

5. Rule change proposals: rate of return framework

5.1 Summary

This section focuses on AER's rule change proposals in relation to the process for estimating the rate of return or WACC.

It questions whether the evidence that the AER has relied upon to demonstrate the case for change support that case. In particular, it demonstrates that the issues that the AER has raised about the constraints over its discretion in relation to deciding on WACC are not well founded. Instead, the evidence provided in this section suggests that the AER has not utilised its existing discretion appropriately.

A major implication of the rule change proposals is the removal of rights to merits review of the WACC aspects of the AER's regulatory determinations. The FIG does not support this. The FIG considers that such merits review rights are a critical component of the accountability framework that the AER should be obliged to operate within.

To the extent that changes are to be made to the existing electricity and gas rules, such changes should ensure that the AER's process for assessing WACC:

- requires that primary regard should be paid to market evidence (i.e. the results of applying the theoretical model must be market-tested);
- requires a commercial and practical approach to the interpretation of that evidence;
- retains sufficient flexibility, particularly given prevailing market conditions, so that market-related variables can be assessed at each regulatory determination rather than fixed during the periodic WACC review; and
- retains the right to merits review.

5.2 The problems

The AER has identified a range of problems with the existing arrangements for determining the rate of return for electricity and gas networks. These problems fall into two broad areas and are explored further in sections 5.2.1 to 5.2.2 below.

5.2.1 Lack of harmonisation

Inconsistencies that have been identified by the AER relate to differences around:

- the requirement to undertake a WACC review;
- the timing of WACC reviews;
- the overall rate of return framework in terms of level of prescription over methodologies and approaches to be applied in setting rates of return; and
- the degree to which regulated businesses are bound by the outcomes of a WACC review.

The FIG notes that whilst the AER's proposals on rate of return address issues of inconsistency, some of them indirectly result in much more fundamental changes. These impacts are highlighted further at Section 5.3 of this submission.

5.2.1.1 *Non-concurrent timing of WACC review for electricity transmission and distribution networks*

The electricity rules currently require the AER to establish certain WACC parameter values for electricity distribution and transmission networks by way of a periodic WACC review. Ideally, to avoid duplication of the AER's efforts, it would be desirable to conduct a single WACC review to apply to both electricity transmission and distribution networks. However, this is not facilitated under the existing Rules which:

- require the distribution WACC review to be conducted not later than every five years with the first interval starting on 31 March 2009; but

- mandates that the transmission WACC review be completed *every five years* with the first review on 31 March 2009.

The AER states that this mismatch in timing could result in a situation where the AER has to undertake separate WACC reviews for distribution and transmission, which would be counter-productive.

As a result, the AER has proposed changes to the rules to align the timing of the process for determining WACC. The AER's preference is for timing arrangements currently applying to electricity distribution businesses to prevail.

5.2.1.2 *Ability to depart from parameters set at WACC Review*

Electricity distributors currently have the ability to depart from the parameter values decided by the AER in the WACC review and subsequently specified in the Statement of Regulatory Intent ("SORI"). Their ability to do so is subject to being able to demonstrate to the AER that there is 'persuasive evidence' to depart from the SORI at the time of distribution determinations.

This arrangement is specific to distribution networks (i.e. transmission networks have no ability to do so) and is in addition to the persuasive evidence test which the AER must also apply at each WACC review in order to depart from a previously adopted value for a specific WACC parameter.

The AER has raised a number of concerns over the consequences of this arrangement, specifically that:

- it encourages distributors to *"cherry-pick"* certain parameters and engage in arguments even where evidence is not persuasive. According to the AER, this has resulted in "*reviews by the Australian Competition Tribunal in pursuing a level of precision which can only be considered spurious in the context of many WACC parameters*";[56]

- there are significant administrative and opportunity costs associated with the AER being in continual "WACC review" mode as a result of businesses continually repackaging data and theoretical arguments which have previously been considered by the regulator;

- in combination with other features of the decision-making framework, it can result in higher than efficient rates of return. This risk arises because by selectively debating specific parameters, the distribution networks effectively draw the AER into an asymmetric assessment of the overall rate of return;[57] and

[56] AER, op. cit., National Electricity Rules, September 2011, page 65
[57] AER, op. cit., National Electricity Rules, September 2011, page 68-69

- it results in consultation processes which are unbalanced as it excludes consumers and other stakeholders who often find the debate overly technical.[58]

On this basis, the AER has proposed that the persuasive evidence test at the time of distribution determinations should be removed. It has also proposed that the SORI be renamed a Statement on the Cost of Capital ("SoCC") to reflect the proposed arrangements.

5.2.1.3 Different WACC framework for gas pipelines and electricity networks

The regulatory arrangements relating to WACC currently differ in a number of respects for gas and electricity networks. These include the following:

- technically broader discretion for the regulator to set the rate of return under the gas rules (subject importantly to the market test)[59], in contrast to a more prescriptive approach under the electricity rules;

- no prescription on the use of a specific methodology or approach for setting the rate of return in the gas rules. Specifically, there is no reference to the use of a nominal post-tax approach as reflected in the AER's Post Tax Revenue Model, which is applied to electricity networks; and

- the gas rules do not contain any requirement for a five yearly WACC review, as is the case for electricity. Instead, the gas rules require a service provider to provide estimates of its proposed rate of return and the various parameters underpinning it when submitting an access arrangement proposal to the AER.

The AER considers that the absence of a consistent rate of return framework across gas and electricity is problematic because:

- ironically, the wider discretion in respect of setting rates of return which is currently available in the gas rules gives rise to unnecessary administrative costs. The AER views rate of return as a benchmark which is largely independent of business / industry specific considerations. It therefore considers that it is appropriate to apply a single rate of return framework across gas and electricity;[60]

- there is a risk that with different rate of return frameworks, different benchmark parameters (e.g. the MRP) could be produced, when the risks of investment reflected in these parameters should be the same across all regulated energy networks. The AER believes that this gives rise to investment distortions between sectors;[61]

- the absence of a WACC review for gas networks means that the AER and service providers are in continual WACC review mode where considerable resources are spent at each access arrangement review. This has resulted in reviews by the Australian Competitive Tribunal which the AER views as counter-productive as it pursues "*a level of precision which can only be considered spurious in the context of many WACC parameters*";[62] and

- the current gas rules allows gas service providers to "*cherry pick*" outcomes of the AER's rate of return decisions which they consider unfavourable to them. This not only time-consuming and costly (as the activity is repeated at each access arrangement review) but also detracts from the AER's ability to set an overall rate of return which it considers adequate.[63] The AER also believes that it results in a consultation process

[58] AER, op. cit., National Electricity Rules, September 2011, page 69
[59] AER, op. cit., National Gas Rules, September 2011, page 7
[60] AER, op. cit., National Electricity Rules, September 2011, page 65
[61] AER, op. cit., National Gas Rules, September 2011, page 3
[62] AER, op. cit., National Gas Rules, September 2011, page 4
[63] AER, op. cit., National Gas Rules, September 2011, page 4

which excludes consumers and other stakeholders who often find the debate overly technical.[64]

The FIG notes that most of these problems are the same as those which the AER has highlighted as arising as a result of the application of the 'persuasive evidence' test at distribution determinations but not transmission determinations. The AER has therefore proposed that the rate of return frameworks for gas and electricity be harmonised to align with the approach currently applying to electricity networks.

5.2.2 Constraints over the AER's discretion

5.2.2.1 Constraints over AER's ability to determine an efficient benchmark rate of return

The existing electricity rules require the AER to have regard to the need for persuasive evidence before it adopts a WACC parameter value that is different to the value adopted at the previous WACC review. This test applies where a parameter value cannot be determined with certainty and is a requirement common to both electricity transmission and distribution regulation.

The AER considers that this requirement constrains its ability to determine an efficient benchmark rate of return. In its view, this arises because the test results in "*undue weight being placed on consistency with previous regulatory outcomes at the expense of setting parameters that are appropriate or otherwise in accordance with the interests of stakeholders.*"[65] The issue is exacerbated by the fact that there has been considerable uncertainty as to how the phrase should be interpreted.

The AER has argued that it is relevant and good practice to consider past regulatory outcomes in light of current evidence and that, even in the absence of this test, it would be a relevant consideration at the WACC review. It is therefore unnecessary for the test to be prescribed. The AER consider that the test should be changed to requiring the AER to 'have regard to' the previously adopted value of method and the national electricity objective.

5.2.2.2 Constraints over AER's ability to set an efficient cost of debt

The existing rules pose some significant challenges for the AER in so far as the cost of debt is concerned. Section 6 discusses this issue.

For the purpose of the analysis in this section, it is relevant to note that the AER has proposed that the definition of the debt risk premium and the methodology to be applied in measuring the debt risk premium be made matters which are to be decided as part of its WACC review.

5.3 The outcomes

The outcomes of the AER's proposals would be:

- one WACC review to be conducted for both electricity and gas networks, which can be initiated by the AER before the expiry of a five year interval;
- the framework applying to gas networks will be same as that applying for electricity networks, in that it will mandate the use of the Capital Asset Pricing Model, estimation of the cost of debt as the sum of a risk free rate and the debt risk premium ("DRP"), and a post-tax WACC approach;

[64] AER, op. cit., National Gas Rules, September 2011, page 5
[65] AER, op. cit., National Electricity Rules, September 2011, page 73

- the definition of the debt risk premium and the methodology for determining the DRP for the purpose of calculating the cost of debt is to be subject to determination by the AER during the WACC review; and

- methodologies and parameter values to be set during the WACC review will be effectively "locked in" and adopted in regulatory proposals and access arrangements until the AER decides that it is appropriate to change them. Most importantly, this codification of WACC parameters means that there will be no ability to contest the AER's decisions on WACC via merits review.

- Ultimately, the bulk of the AER's proposals in relation to the process for estimating the cost of capital are aimed at providing it with wider discretion to set parameters which are binding on regulated businesses and reduced choices or options for regulated gas businesses in terms of how the WACC is to be set. In gas, the use of the Capital Asset Pricing Model and estimation of the cost of debt as the sum of a risk free rate and the debt risk premium would become mandatory, and the "market test" of Rule 87(1) would effectively be lost. An important indirect consequence of the AER's proposals is the effective removal of the right to contest its decisions on WACC, which are currently allowed for under the electricity and gas laws.

5.4 The evidence relied upon

5.4.1 Lack of harmonisation

As a general principle, the FIG is supportive of rule changes which are aimed at removing inconsistencies in the regulation of electricity transmission and distribution networks, and between gas and electricity networks. Where there are no sound administrative or economic reasons for such differences to exist and the differences result purely in inefficient duplication of effort, the FIG considers that removal of such inconsistencies would lead to improved outcomes for regulators as well as regulated businesses. The inconsistent timing for conducting and completing WACC reviews for distribution and transmission businesses, for instance, is a good example of this.

The AER's proposals to remove existing inconsistencies, however, entail more than just the removal of duplicated effort or unnecessary costs. They involve changing some fundamental aspects of the existing regulatory frameworks.

For example, whilst removing the persuasive evidence test at the time of electricity distribution determinations would make it consistent with the existing position for transmission networks, this change will significantly reduce the opportunity for distribution businesses to contest parameter values outside of the WACC review. Similarly, the AER's proposals to resolve the inconsistency between the rate of return frameworks for gas and electricity by amending the gas rules to mirror the AER's proposals in relating to electricity, will result in a more prescriptive approach being adopted in assessing the WACC for gas transmission and distribution businesses than is currently the case.

Given that the changes proposed are fundamental in nature, it is necessary to ensure that there is sound case for change. In both cases, the FIG considers that it is an understatement for the AER to state that the changes merely entail "*loss of flexibility in dealing with changes in market conditions and theoretical developments in the short term*".[66] Furthermore, the FIG does not consider that the AER has provided a sufficient case for the changes that it has proposed. Specifically:

- **There is no evidence that the persuasive evidence test at the time of distribution determinations has been misused.** The AER's claims that distributors *"cherry-pick"*

[66] AER, op. cit., National Electricity Rules, September 2011, page 83. AER, op. cit., National Gas Rules, September 2011, page 5

certain parameters and engage in arguments even where evidence is not persuasive is not supported by any evidence. Whilst it is true that distribution businesses can and have debated WACC parameter values outside of the WACC review, the AER has not presented any evidence to show that this debate is unproductive. In fact, the success that gas and electricity businesses have had in appealing the AER's decisions on the cost of capital indicates that on balance, there have been legitimate grounds for businesses to depart from the WACC review outcomes and that the evidence to support this was persuasive. This evidence was alluded to at Section 4.2.2 of this submission and is expanded in the following pages.

The FIG would also add that if *"cherry-picking"* were a problem (see Section 4.2.2); it has not been confined to regulated businesses. Notwithstanding the absence of a requirement for a WACC review under the gas regulatory framework, the AER has in the past applied the outcomes of the electricity WACC review in its gas access arrangement decisions citing the need for consistency between gas and electricity decisions. However, the AER has recently applied a value of 6 per cent for the MRP in its access arrangement decision on Envestra's Queensland gas distribution network despite the fact that the current SORI value for the MRP is locked in at 6.5 per cent. It would therefore appear that in that instance, the AER was prepared to overlook the benefits of consistency. This action by the AER has resulted in an appeal to the Australian Competition Tribunal by Envestra.

- The AER has failed to consider the costs that have been avoided as a result of businesses having the opportunity to question the AER's decisions on WACC. The AER claims that there are high administrative and opportunity costs involved in being in continual "WACC review" mode but has not provided any indication of the quantum of costs involved. Nevertheless, the FIG does not dispute that there are costs incurred in having to revisit arguments that have previously been raised. However, it is also true that significant costs to regulated businesses have been avoided as a result of businesses contending the AER's decisions on WACC and pursuing merits reviews where necessary. The FIG is aware that Ernst & Young has estimated the revenue impact to businesses at approximately $725 million per annum,[67] however the true economic cost is the efficiency loss which flows from the distortion in investment decisions of the affected businesses. The costs of an incorrect rate of return therefore far outweigh the administrative costs of being in continual "WACC review" model.

- There is no evidence that the persuasive evidence test has contributed to an asymmetric assessment of the overall rate of return. The FIG notes that the AER has identified this as a risk, but has not provided any evidence to indicate that this risk has materialised. There are currently provisions in the existing rules which effectively act as a "re-opener" in the event of an appeal by a regulated business on an aspect of the AER's regulatory determination. These provisions were designed to address *"cherry-picking"* by businesses and may be exercised entirely at the regulator's discretion. The following quote from the MCE's final decision on its review of decision-making in the gas and electricity regulatory framework (May 2006) supports this:

  "This measure allows an application for review to operate as a broad "re-opener" if the original decision-maker so elects, notwithstanding limited grounds of review put forward by the applicant.

  What is required is a provision to the effect that, if a review is brought by a network or service provider, then the regulator may, in its absolute discretion, seek a review by the Tribunal of other parts thereof, or of the entire decision, and the review would proceed on that basis, not only on the (limited) grounds of review that the network or service

[67] Ernst & Young, Analysis of costs associated with WACC-related errors, December 2011

provider advances. This would then enable the regulator to argue such things as: 'yes there was an error but we compensated for it by an adjustment we made elsewhere.'"[68]

It is instructive to note that the AER has not chosen to use these rights in reviews to date.

- The AER has not provided any evidence on why the rate of return framework for gas pipelines should be the same as for electricity networks. The FIG would remind the AEMC that in the MCE's previous review of access regimes, there was a clear decision on its part to adopt a "fit for purpose" regulatory model. The AEMC clearly recognised this in its previous review of the electricity transmission rules:

  "In the context of the process, methodology and decision criteria for revenue determinations, the relevant consideration for the Commission is whether the balance between increased guidance or increased discretion encompassed in the Rules will provide superior outcomes with reference to good regulatory design and practice principles.

  As an overarching principle, the Commission considers that the extent to which the Rules codify matters of process, methodology or decision making criteria should be determined on a 'fit for purpose' basis."[69]

  The approach is also consistent with the recommendations of the Expert Panel on Energy Access Pricing.[70] There is therefore evidence to suggest that the existing structures of the gas and electricity access regimes were therefore intentionally designed to be different.

  The FIG notes that notwithstanding the existing differences in the WACC frameworks in gas and electricity, the AER's practice since issuing the 2009 WACC decision has been primarily to adopt the CAPM, post-tax WACC formula and SORI values for gas pipelines as it does for electricity networks. The AER's decision to apply a similar approach has not resulted in appeals by regulated gas pipelines. It would therefore appear that at a practical level, the AER has not been constrained from achieving consistency at this level despite the different rate of return frameworks. The FIG notes that the current appeal against the AER from Envestra (referred to earlier) relates to the AER's decision to selectively depart from the MRP value stated in the SORI.

- The FIG acknowledges that this history is evident not only in AER decisions (and its predecessor, the ACCC), but also in the rate of return decisions of some jurisdictional regulators. However, the AER did have the opportunity in the first WACC review to take an entirely different approach, and was encouraged by the FIG to do so. The FIG stated then that: *"The AER's documents demonstrate the highly forensic approach it has taken to assessing the cost of capital, when the market evidence shows that such a focus is inappropriate."*[71]

  It chose not to do so but instead continued debating many highly technical matters at a forensic level which, in the FIG's view, did not resolve these matters but raised even more matters for future debate. This debate has occurred but given that the WACC decision does not qualify as a reviewable decision, regulated businesses have chosen to debate (where they can) the AER's application of the SORI parameters in regulatory

[68] MCE, Review of Decision-Making in the Gas and Electricity Regulatory Frameworks, Decision, May 2006, page 21.
[69] AEMC, Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006, Rule Determination 16 November 2006, p32.
[70] Expert Panel on Energy Access Pricing, Report to the Ministerial Council on Energy, April 2006 p84.
[71] FIG, Submission to the AER's WACC parameter review: The investor perspective: January 2009, page 2. Indeed, it went to some lengths to demonstrate how the cost of capital is estimated in commercial practice (see pages 20-21), and to contrast that with the AER's approach.

determinations. The evidence therefore indicates that it is the AER's approach to WACC that has led to the problems of *"spurious"* accuracy which plagues rate of return decisions today.

5.4.2 Constraints over the AER's discretion

As noted earlier, the FIG recognises that there are some significant challenges for the AER in estimating the cost of debt in accordance with the approach specified in the electricity rules. These issues are addressed in Section 6 of this submission.

On the AER's proposed removal of the persuasive evidence test at the WACC decision, the FIG considers that the AER's case for its removal is not entirely clear. The AER has only undertaken one WACC review under the rules to date. Whilst the FIG accepts that there may be uncertainty over the amount of weight that should be given to the 'need for persuasive evidence' before deciding to depart from previously adopted values, the issue has not really been tested legally so far in the context of the WACC decision. The FIG acknowledges that the meaning of the phrase was briefly alluded to in the appeal on the value of imputation credits by Energex Limited[72] which the AER has cited to support its case. However, that related to an appeal of a regulatory determination and not to the WACC decision itself, and the AER has already separately proposed the removal of the persuasive evidence test at the regulatory determination stage.

In the FIG's view, the persuasive evidence test at the periodic WACC review is critical to achieving regulatory certainty. Without it, there would be no guidance on the threshold for the AER to exceed before implementing changes to parameter values. If, as the AER has identified, the test is unclear, the solution should lie in providing additional clarification in the rules, rather than removing the test. Even if greater clarification is provided, however, it is unlikely that the AER will be able to apply the test without some exercise of regulatory judgment. The evidence on appeals against the AER's decisions indicates that it is possible for that judgment to be appropriately exercised with the existing level of prescription in the rules (given that the Tribunal was able reach its decisions on the basis of the same information).

More importantly, it highlights the areas where the AER's decision-making processes has to date been deficient. Indeed, as the following quote suggests, the AER itself recognised the extent of the errors that it made in the appeal by Energex on gamma:

"The AER now accepts that the distribution ratio of 71 per cent derived from Hathaway and Officer 2004 was in fact a long-term distribution ratio … The AER acknowledges that there was evidence submitted to the AER that identified that error and that the evidence was persuasive evidence justifying departure from the value of gamma."[73]

In another appeal by EnergyAustralia and Others in relation to the averaging period for the risk free rate, the Tribunal noted that the AER did not establish an appropriate reason for rejecting the averaging period proposed by the applicants without further inquiry. The Tribunal was of the view that rather than assume that a rate at a closer date would give a better estimate, *"the AER should have examined the evidence regarding expected future rates*."[74] By not making the appropriate inquiries, the Tribunal considered that the AER's decision to withhold agreement on the proposed averaging periods was "*unreasonable."*[75]

The FIG submits that the appropriate remedy is not for the AER to be provided with wider discretion and reduced accountability, but for improvements to its evidence assessment and decision-making processes and perhaps greater scrutiny of its performance.

[72] Application by Energex Limited (Gamma) (No 5) [2011] ACompT 9 (12 May 2011), [36] and [37].
[73] Application by Energex Limited (Gamma) (No 5) [2011] ACompT 9 (12 May 2011), [51]
[74] Application by EnergyAustralia and Others [2009] ACompT 8, para 94.
[75] Application by EnergyAustralia and Others [2009] ACompT 8, para 104.

The FIG submits that the following evidence (which we briefly alluded to in the foregoing discussion but expand upon here) should be afforded greater weight in the AEMC's assessment of the AER's rule change proposals.

In the FIG's opinion, the most significant issue raised in the AER's proposal is the effective removal of the right to challenge the AER on issues relating to WACC via merits review. The AER's proposals achieve this by removing the persuasive evidence test at electricity distribution regulatory determinations and in the WACC decision, and by giving itself considerable discretion to set and lock in all WACC parameter values, including the cost of debt, via its periodic WACC review. As the WACC decision is not a reviewable decision, the indirect consequence of the AER's proposals is the removal of all rights to merits review on WACC issues. Furthermore, by extending this framework for WACC to the gas rules, it would be in the same situation.

Overall, the AER's proposals will give it the discretion to set and lock in the rate of return for all regulated businesses, and will allow it to do so with significantly reduced levels of accountability. This is a fundamental change which the FIG does not consider warranted.

As we have highlighted in previous parts of this submission, the problems which the AER has raised are, with limited exception, not related to deficiencies with the rate of return frameworks of the electricity and gas rules. Rather, they reflect deficiencies in the AER's performance with respect to its ability to objectively assess the evidence that is put before it, and to demonstrate, via sound regulatory decisions, that it has exercised its regulatory judgment appropriately. This observation is evidenced by:

- the number of matters brought to appeal, which have been decided by the Tribunal in favour of network service providers, or which have been conceded by the AER. This analysis is set out in Appendix A;
- the types of errors which the AER has made in its regulatory decisions, as highlighted in the Tribunal's decisions. Some of the Tribunal's findings include that:
  - the AER acted "*unreasonably*";[76]
  - the AER's approach involved "*too cursory a rejection*" of evidence and analysis that was "*too superficial*";[77]
  - in relation to the appeals on the value of imputation credits, the AER conceded it had misused its own evidence on the distribution ratio as soon as the relevant appeal was made (even though it had consistently denied this) and on the AER's analysis of the utilisation rate, the Tribunal stated that the AER's approach had "*no logic to it*."[78]

These comments by the Tribunal raise important questions over the quality of the decisions made by the AER. In the (effective) absence of merits review rights, the opportunity for such errors to be corrected would be limited, including those that were conceded by the AER.

Section 4.4 discusses the case for merits review in more detail.

It is worth noting that the Productivity Commission ("PC") has also made similar observations about the contribution made by merits review processes to improved public administration in its 2004 Review of the Gas Access Regime:

[76] Application by EnergyAustralia and Others [2009] ACompT 8, para 109
[77] Application by ActewAGL Distribution [2010] ACompT 4, para. 61-62
[78] Application by Energex Limited (No 2) [2010] ACompT 7, para 95.

"First, the process of review provides an opportunity for decisions by Ministers and regulators to be scrutinised and challenged. Such a process might increase awareness among decision makers about the exercise of decision making power, within the terms of authorising legislation. It can promote the consistent application of the law by decision makers and lead to improvements in the quality of primary decision making. ...Second, decisions made in the courts and tribunals contribute to a collection of case history, which can improve the predictability and clarity of interpretation."[79]

The PC also goes on to note that the threat of merits review encourages those making decisions to be accountable:

"There is a need for a merits review under the Gas Access Regime. In the Commission's view appropriate protection of property rights and natural justice are key considerations. While the appeal process might take considerable time and expend considerable resources, the regulatory bodies and Ministers have powers to make decisions that have an impact on fundamental rights of service providers. The prospect of exposure to imperfect regulatory instruments means there is a strong case for a merits review."[80]

There are therefore very sound reasons for retaining the right to have decisions made subject to merits review.

The FIG does not support the (indirect) removal of rights to merits review on rate of return (and other) issues nor any proposals which would have the effect of increasing the AER's discretion. To date, the evidence strongly indicates that the AER has not demonstrated its ability to utilise its existing discretion appropriately. On this basis, we fail to see why the AER should be given wider discretion and to have this accompanied by significantly reduced accountability over its decisions.

5.5 The costs and benefits of the rule change proposals

The FIG submits that the AER's proposals in relation to the processes for estimating the cost of capital will likely have a significant and negative impact on investor perception of the risk of investing in regulated assets. Due to the long term nature of infrastructure assets, investors require a reasonable degree of certainty in relation to the return on capital they can expect to receive in order to commit capital to such assets. For the AER's proposals not to have an adverse impact on investor perceptions of investment risks, investors must be confident that the AER is able to - in the absence of the ability to contest the AER's decisions on rate of return - make sound decisions which can stand up to scrutiny. The FIG is not convinced that this will be the case given the existing indicators of how satisfied regulated businesses are with the AER's decisions (as indicated by the number of appeals relating to rate of return) and the outcomes of those appeals (which highlight significant deficiencies in the AER's decision-making processes).

As highlighted earlier, there are sound reasons for the AER's decisions on rate of return (and other matters) to be subject to accountability via the threat of merits review. The AER's proposals highlight the costs associated with having to continually debate technical matters in relation to WACC. However, the AER has not taken into account the significant cost savings which have been achieved as a result of having the AER's errors on WACC corrected via merits review, which the FIG is aware has been estimated by Ernst & Young at around $725 million per annum. As noted earlier, this amount represents forgone revenue to regulated businesses; however, the true economic cost is the efficiency loss which flows from the distortion in investment decisions of the affected businesses. The magnitude of these cost savings also provides an indication of the costs that may continue to be avoided in future if the AER continues to be made accountable for its decisions on WACC.

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[79] Productivity Commission 2004, Review of the Gas Access Regime, Report No. 31, Canberra, page 486-7.
[80] Productivity Commission, Ibid, page 498.

5.6 Alternatives to the rule change proposals

The FIG considers that the evidence presented in this submission in relation to rate of return provides no basis to support the case for giving the AER wider discretion and reducing its accountability. We consider that the real problem relates to deficiencies in the AER's decision-making processes. At the minimum, therefore, the appropriate solution is for greater scrutiny to be placed over the AER's performance to ensure that its own decision-making processes effectively support it in discharging its obligations under the rules and law. One mechanism to do this, would be to introduce periodic (e.g. every five years) independent reviews of the AER's performance, much in the same way that other independent statutory authorities are currently subject to.

Should the AEMC, however, be inclined to support the AER's proposals for an increase in its discretion, the FIG considers that the AER should continue to be made accountable for the exercise of its discretion via the operation of the merits review framework. This could mean that in addition to greater scrutiny over the AER's performance, the AEMC considers one or more of the following.

5.6.1 Retain persuasive evidence test and extend it to electricity transmission

The FIG does not support the indirect removal of merits review which the AER has proposed to achieve via removal of the persuasive evidence test at distribution determinations. The FIG views the ability to contest the AER's decisions on WACC as critical to ensuring that rates of returns are estimated with appropriate regard to sound theoretical principles and market evidence. On this basis, the FIG considers that electricity transmission networks should be permitted to depart from the values established at the periodic WACC review on the basis of persuasive evidence and have the right to appeal the WACC aspects of the AER's transmission determinations, in the same way that electricity distribution networks and gas networks currently have.

The FIG is generally supportive of achieving greater consistency in the way in which rates of returns are determined across regulated gas and electricity assets. However, greater consistency should not be achieved at the expense of appropriate recognition being given to the different risk profiles of regulated assets and the need to ensure that the rate of return is set at a level commensurate with the risk of the underlying assets.

5.6.2 Market testing of calculated WACC outcomes

The FIG sees merit in obliging the AER to adopt a market test as part of the process of deciding on an appropriate rate of return. This approach currently exists in the NGR in the form of Rule 87(1) which requires, in effect, that any technical assessment of the cost of capital also meets a higher market test (i.e. is the proposed rate of return consistent with the prevailing conditions in the market for funds and the risks in providing the service).

"The rate of return on capital is to be commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services."[81]

The FIG notes that a more limited form of this requirement currently exists in the NER in the form of clause 6.5.4(e)(1), which requires that in undertaking its WACC review, the AER must "*have regard to the need for the rate of return calculated for the purposes of clause 6.5.2(b) to be a forward looking rate of return that is commensurate with prevailing conditions in the market for funds and the risk involved in providing standard control services*".

[81] NGR, Rule 87(1)

The FIG considers that there would be merit in considering a model which places a stronger obligation on the AER to test or cross-check calculated WACC outcomes against market evidence, perhaps not dissimilar to that which currently exists in the gas rules. This should apply both at the time it sets the parameters in the periodic WACC review and when deciding upon market-related variables at the time it makes its electricity distribution and transmission network determinations. This approach:

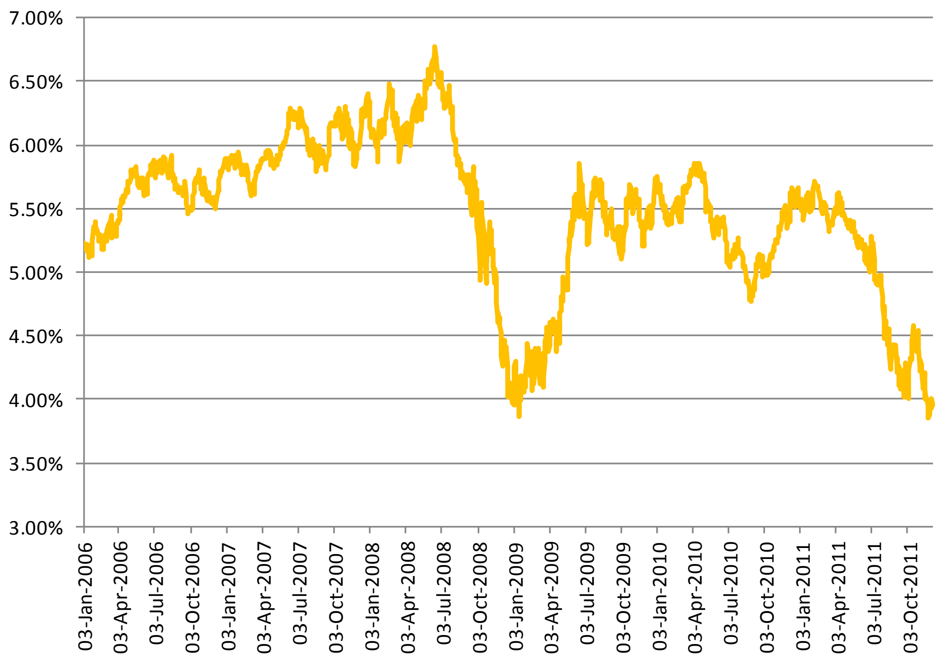
- would be consistent with the key points made in the FIG's submission to the AER's first WACC review and would ensure that the rate of return allowed by the AER is not at odds with the rates of returns required by investors, as reflected by market evidence; and

- may assist in shifting the attention away from how specific parameters are estimated in the AER's determinations. This is because ultimately, appeals over the technical aspects of WACC arise because the applicants are dissatisfied with the overall rate of return outcome.

The AER's recent draft decisions for Aurora Energy and Powerlink provide good examples of where attaching greater prominence to market evidence in regulatory decisions might assist in attaining more commercial outcomes on WACC. The AER has allowed returns on equity of 9.08% and 9.52% in respect of Aurora Energy and Powerlink, respectively.

The FIG has not undertaken a detailed analysis of the AER's draft decisions for Aurora Energy and Powerlink however, it is apparent that the return on equity proposed in those draft decisions are driven primarily by cyclically low yields on 10 year Australian Government bonds. The FIG notes that the 10 year Australian government bond yield has displayed significantly greater volatility since the GFC and reached cyclically low levels around late 2008 to early 2009. In recent months, yields have declined to new lows again.

Figure 5: Yield on 10 year Australian Government Bond



Source: Reserve Bank of Australia

It is clear that setting rates of return (which are to last for five years) based on such volatile data would result in allowed returns on equity which vary by almost 3% in the last three years. Given the present heightened levels of risk in capital markets, it is unrealistic and counter-intuitive to expect that equity investors today would demand a return on equity that is so materially lower than in the past two years.

The FIG is aware that market and commercial considerations often need to be addressed by equity analysts and valuation experts who are well aware of the limitations of the CAPM and its application and understand when an appropriate exercise of commercial judgment is required:

- in Grant Samuel's recent valuation of Bow Energy, it adopted a range of 10.5% to 11.5% for WACC notwithstanding the calculated WACC range was 10.4% to 11.1%. Grant Samuel noted that the adjustment was judged to be appropriate during the recent market upheaval around August 2011, which saw the yield to maturity on 10 year Australian government bond yields decline sharply.[82]

- Also in another recent valuation by Grant Samuel, a WACC range of 8% to 9% was used despite calculated WACC outcomes ranging from 7.72% to 8.87%. It would appear that Grant Samuel considered the positive adjustment warranted as it considered the calculations to reflect *"...a very crude calculation based on statistics of limited reliability and involving a multitude of assumptions"* and a view that *"...the discount rates adopted are likely to be more consistent with those that acquirers of Foster's may utilise."*[83]

In both of these examples, it would appear that Grant Samuel decided it was appropriate to err on side of caution by allowing what it judged was adequate headroom.

Based on the evidence presented here, the FIG considers that there is a strong case to ensure that any changes to the rules compels the AER to give greater prominence to market evidence in validating calculated WACC outcomes, and importantly, ensure that they bring a more practical and commercial approach to the interpretation of that evidence in setting returns.

5.6.3 Retaining flexibility in parameter values

The FIG is not opposed to retaining five yearly WACC reviews by the AER. However, as we have highlighted in this submission, there is a need to retain flexibility with respect to certain WACC parameters given the volatile market conditions which have prevailed since the GFC. This means that appropriate regard must be had to the need to achieve certainty by way of fixing the values of certain parameters in the periodic WACC review, as well as the need to ensure that the WACC that is subsequently determined set by the AER can respond to rapidly changing market conditions.

The FIG notes that at the first periodic WACC review, the AER did allow a higher MRP of 6.5% to take into account the market conditions associated with the GFC. It remains arguable whether or not the additional premium of 50 basis points allowed was sufficient to compensate for the additional market risks experienced during the height of the GFC, however, there are many who believe that the effects of the GFC will last for some time.[84] It is ironic that under these circumstances, the AER has sought to reduce the MRP allowed in its recent determinations to 6%.

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[82] Grant Samuel, Independent Expert Report in relation to the proposal by Arrow Energy Holdings Pty Ltd, 16 November 2011, Appendix 2, page 8, 10.

[83] Grant Samuel, Independent Expert Report in relation to the proposal by SABMiller PLC, 26 October 2011, Appendix 4, page 11.

[84] S. Bishop, Adjustment the market risk premium to reflect the Global Financial Crisis, JASSA, Issue 1, 2011, estimates that at December 2010, market risk was over 60 percent above their estimate of the long term average risk level. Bishop argues that "...*the GFC is not over and still has a considerable time to run*." The Chairman of the Future Fund, David Murray, has also recently been quoted as saying that "...the problems of the global financial crisis that started in the US four years ago had deepened thanks to current European dramas and could last for up to two decades." (The Weekend Australian, November 26-27, 2011: Sovereign debt woes 'could last 20 years').

If anything, investor required rates of returns are more likely to be factoring in a rise in risk premiums. Whilst the FIG concedes that it is difficult to objectively measure the expected MRP, it has been suggested that the evidence from bond spreads could provide an objective indicator of increases / decreases in risk:

"The recent behaviour of the forward MRP is similar to the behaviour of debt spreads in the bond market ... This is to be expected since both are risky assets and both can be priced using the CAPM. ...Although there is some disparity between the behaviour of the BBB premium and the premiums of other ratings of debt, all are above historical levels, particularly BBB debt, which is the investment grade bond 'closest' to equity."[85]

The FIG considers that the value of parameters such as the MRP, the risk free rate, debt risk premiums and inflation should not be fixed in the WACC review but should be determined at the time of relevant determinations / decisions and due regard should be had to market evidence in setting these parameter values at the time.

Similarly, if the AER is to retain the right to re-open WACC parameter values at each regulatory determination, the same right should also be provided to regulated businesses.

[85] Ibid, page 10.

6. Rule change proposals: cost of debt

6.1 Summary

This section focuses on the AER's rule change proposals relating to the cost of debt.

It acknowledges that the AER currently faces significant challenges in measuring the cost of debt based on the benchmark characteristics which are prescribed in the electricity rules. Given that the AER has to date applied a similar approach in gas network regulation, and is intending to harmonise the WACC frameworks in gas and electricity, the comments made herein are also relevant to the AER's rules change proposals in respect of the gas rules.

The FIG is not opposed to exploring ways of addressing the measurement issues on the cost of debt, and can also potentially see merit in adopting a benchmark embedded cost of debt approach. However, the FIG would urge the AEMC to consider the following matters in reaching its decision on the AER's and EUC's proposals:

- the importance of retaining the benchmark 10 year tenor assumption, given that there is evidence which suggests that this assumption is consistent with the financing preferences of regulated NSPs, and that market situation is a cyclical issue;
- the importance of ensuring that the cost of equity is not eroded as a result of a decision to adopt a shorter tenor for the nominal risk free rate; and
- refinancing risks are appropriately recognised if the benchmark tenor is to be reduced below 10 years.

6.2 The problem

6.2.1 Measuring the debt risk premium

The FIG recognises that the AER has, in recent determinations, faced significant challenges in estimating the benchmark cost of debt based on the current requirements in the electricity rules on the definition of the debt risk premium ("DRP"). The problem is one that relates to measurement, and has arisen largely due to the lack of data in the Australian corporate bond market on bonds with a tenor and credit rating matching the definition of the benchmark corporate bond in the electricity rules.

This measurement problem has been particularly acute since the onset of the Global Financial Crisis ("GFC") in 2008/09 and has resulted in conventional market data sources such as Bloomberg and CBA Spectrum ceasing publication of data on "fair yield" curves for longer dated securities at the BBB/BBB-/BBB+ rating band. For example, at the BBB rating, Bloomberg currently only publishes a fair yield curve for 7 year corporate bonds.

The FIG is aware that the AER did, for some time, rely upon various methods of extrapolation to estimate the benchmark 10 year BBB+ corporate bond yield, but this approach has been subject to much debate and has become harder to implement with continuing cessation of market data on longer dated bonds over time.

6.2.2 Relevance of the benchmark

In addition to the issues associated with measurement, questions have also been raised by the AER and the EUC over the relevance of the benchmark DRP. In both cases, the issue which is in dispute relates to the question of whether the benchmark cost of debt should be defined in a way that gives greater weight to the financing costs actually incurred by regulated businesses.

The AER:

- considers that the benchmark DRP has recently been set at rates significantly above NSP's actual costs; and

- has provided data which indicates that businesses have issuing debt at tenors well below 10 years and at margins between 1.8 and 3.6 per cent (averaging around 2.4 per cent).[86] By contrast, the AER has approved DRP values of between 3 and 4 per cent in gas and electricity determinations since the beginning of 2010.

The AER has proposed a set of rule changes that will remove the prescription on how to calculate the nominal risk free rate and the DRP. The AER is proposing that these matters be consulted on and decided as part of its periodic WACC review. This approach will also apply to gas since the AER has also proposed that a single common WACC framework apply to both.

The EUC has also argued that the existing methodology for calculating the cost of debt is flawed and overstates the actual costs to businesses by around 250 basis points (for privately owned businesses) to 350 basis points for government-owned businesses.[87] It estimates that:

"If the allowed return on debt was based on the actual cost of debt, NSP income in 2011 would be around \$1.2bn or 12 % lower than it is now. This translates into average retail electricity price decreases of around 7%. This \$1.2bn gap is excess profits for the government and private owners of the NSPs, at energy users' expense."[88]

The EUC believes this problem has arisen because:

- the wrong benchmark has been specified in the rules;[89] and

- insufficient weight has been placed on the actual debt cost of businesses.[90]

It has proposed changes to the methodology for calculating the DRP, to reflect its view that:

- government-owned service providers should be allowed a cost of debt which reflects the cost of the debt raised by state government treasuries, without regard for competitive neutrality and government guarantee fees; and

- privately-owned NSPs should be allowed a cost of debt which reflects the cost of embedded debt.

The EUC's proposals therefore require the abandonment of long established views in relation to competitive neutrality.

The EUC has also proposed that the methodology for calculating the DRP and the cost of debt be fixed in the rules. This contrasts with the AER's proposals that matters relating to the cost of debt and DRP be consulted and decided on in the periodic WACC review. The FIG also notes that the EUC's rule change proposal is silent on the application of its cost of debt methodology to regulated gas businesses.

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[86] Australian Energy Regulator, Rule Change Proposal, Economic regulation of transmission and distribution network service providers, AER's proposed changes to the National Electricity Rules, September 2011, page 80, Table 7.5.
[87] EUC, Op cit, page 5.
[88] EUC, Op cit, page 6.
[89] EUC, Op cit , page 24-26
[90] EUC, Op cit, page 27-28

6.3 The evidence relied upon

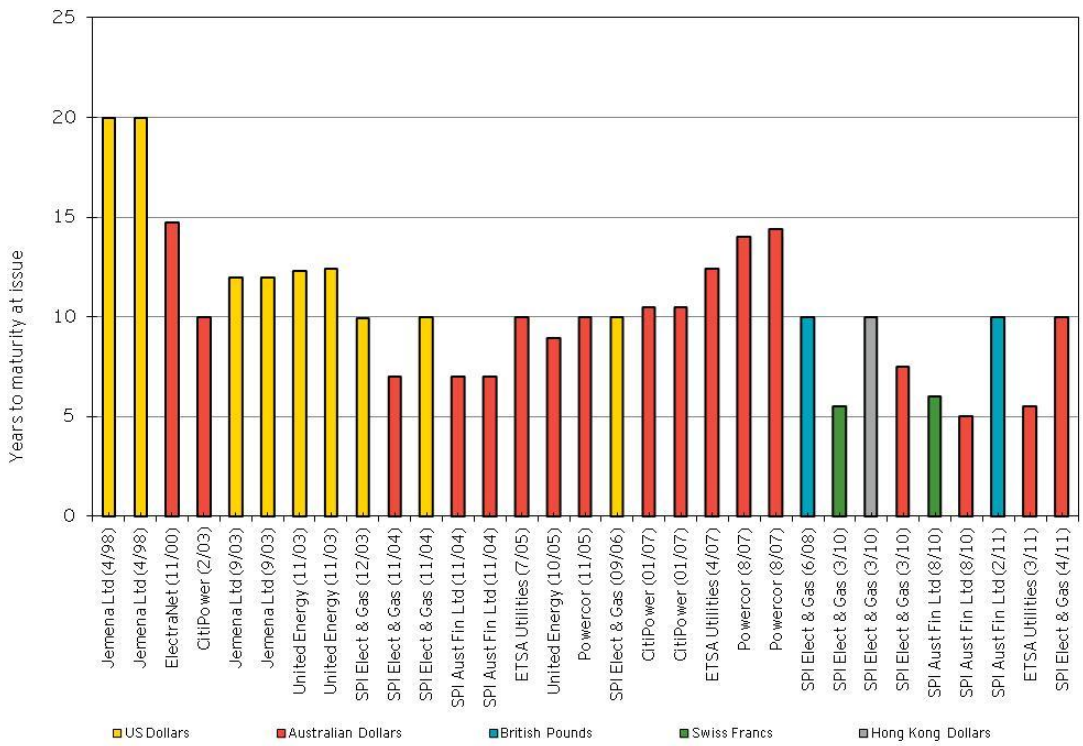
6.3.1 Measurement problems

The problems associated with measuring the cost of debt are evident in the paucity of market data on 10 year BBB+ rated Australian corporate bonds. Both the AER and EUC make reference to this.

The FIG notes that the lack of data in Australia reflects the fact that there is and has been very little capacity for the market to absorb long term debt in Australia in recent years. By contrast, longer term debt issues are (and have been) more common in the US and UK corporate bond markets. Indeed, the data presented by the EUC on Australian network utilities confirms that such businesses have historically raised long term debt.

This is illustrated in Figure 6 below.

Figure 6: Australian network utility bond issues since 1998



Source: EUC, Proposal to change the National Electricity Rules in respect of the calculation of the Return on Debt, Table 1, page 14

The data indicates that of the 31 issues which are shown in Figure 6, 22 issues were of tenors of 10 or more years. This data is also consistent with previous advice to the AER by its consultant, Deloitte, at the time of the first WACC review, regarding the debt financing practices of regulated energy businesses:

"Historically, most energy regulated companies would try to achieve debt funding for as long as possible, 10-15 years, and hedge the interest rate risk to lock in a fixed rate for the regulatory term (5 years) using interest rate swaps."[91]

To this extent, the evidence suggests that the current definition of the benchmark cost of debt in the rules was not inconsistent with the evidence on the debt tenor preferences of

[91] Deloitte, AER: Refinancing, Debt Markets and Liquidity, 12 November 2008, page 30

regulated network businesses at the time they were put in place. The GFC, however, has reduced access to long term debt and has necessitated shorter term debt issues for regulated NSPs. As we highlight in Section 6.4, the use of shorter term debt to finance long-lived assets is not a costless alternative as it exposes equity holders to significant re-financing risks.

Nevertheless, the FIG acknowledges that lack of data is an issue which has worsened since the GFC. However, it remains unclear to the FIG whether shortened tenors are now a permanent feature of the Australian corporate bond market or whether this pattern reflects cyclical conditions. The former would imply that the problem is a systematic one and if so, the FIG would agree that it would be necessary to re-visit the definition of the benchmark cost of debt. As we discuss at Section 6.4, however, the tenor element of the DRP is linked to the tenor of the nominal risk free rate, which in turn is set at 10 years based on widely accepted practice in calculating WACC on the basis of the CAPM. Consequently, changes to the tenor of the nominal risk free rate – which will remain unknown until the AER's WACC review - will also affect the calculation of the expected cost of equity. This can have a material impact on the overall WACC and create significant uncertainties for investors.

These considerations are discussed further at Section 6.4 below.

6.3.2 Higher than efficient cost of debt allowance

Both the AER and the EUC have relied upon evidence on the pricing of recent debt issues by regulated gas and electricity businesses to support their assertions that the allowed cost of debt, calculated by reference to the benchmark cost of debt in the NER, overstates the cost of debt that regulated electricity networks actually incur. The AER asserts that this is also the case with regulated gas pipelines.

The FIG notes that the evidence presented by the AER on debt issues since 2010 relates to issues with:

- terms to maturity ("TTM") varying from 3 years to 10 years. Out of the 12 issues tabulated, only 3 had TTM of 10 years;
- bank debt as well as corporate bonds – 4 out of the 12 issues were bank debt;
- overseas as well as domestic market issues.

The analysis presented by the AER raises a number of issues:

- given that credit spreads typically increase at longer TTM[92], the FIG questions whether the AER has overstated its claims on the extent to which regulated businesses have received windfall gains. A more meaningful comparison would be the cost of refinancing three year debt over a ten year term, against the cost of a ten year debt issue;
- the DRP measured by the AER in Table 7.5 of its rule change proposal reflects the margins calculated by reference to the Australian 10 year Commonwealth Government Bond yield. Given that some of the debt issues were undertaken in offshore markets, the FIG questions whether the true credit or risk premium reflected in the debt raising should not be measured by reference to that market's prevailing 10 year government bond. Measuring the premium in this way would give a better indication of the term premium associated with debt of that type and credit risk rating; and
- it is unclear from the analysis whether the varying DRP's measured by the AER could relate to differences in the credit ratings of the issuer since no ratings information is

[92] This occurs under normal yield curve conditions. Where the yield curve is inverted, the reverse would occur, i.e. short term rates would exceed long term rates.

provided by the AER. Similarly, there is no information on whether any of the debt issues analysed by the AER were credit enhanced in order to secure higher ratings or lower spreads. Where credit enhancement has been undertaken to achieve lower spreads, the cost should be taken into account.

6.4 Other evidence worth considering

6.4.1 Backward-looking cost of debt

As noted in the foregoing discussion, both the AER and EUC have proposed moving towards an approach to estimating the cost of debt that gives greater weight to the actual cost of debt incurred by businesses.[93] The AER has not provided any details about how it would seek to calculate the actual cost of debt; however, the EUC has proposed that the cost of debt reflect embedded costs for network service providers. The EUC's proposals therefore move away from the current forward-looking model for estimating the cost of debt towards a historical based approach.

The FIG is open to considering a backward-looking approach provided that the concept of a 10 year "benchmark" (appropriately defined) is retained. We also observed that the EUC's analysis is based on a period when DRPs have been at cyclically high levels. Consequently, the DRP may look high when compared with embedded or actual costs of debt.

In an environment where DRPs are declining from historical levels, an embedded average cost of debt would fall at a reduced rate relative to an approach based on spot rates. Therefore to the extent a backward-looking approach is adopted, the FIG would need to be comfortable that the regulator would continue to commit to such an approach in a declining DRP environment.

6.4.2 Consistency with efficient financing practices

The AER has proposed to remove the prescription in the current electricity rules relating to the calculation of the nominal risk free rate. This adjustment will remove the requirement for the AER to ensure that the DRP reflects a 10 year tenor. As discussed below, the AER has previously proposed to adopt a five year term for the risk free rate. It is relevant to ask whether a cost of debt established on this basis would be consistent with the financing practices of efficient regulated networks as the rules currently require.

The FIG considers that the following evidence is relevant to assessing this question:

- Firstly, the proposal to move away from a 10 year term for the risk free rate is not new:

  - the AER debated this issue at some length in its first WACC review. The evidence indicates that the AER has been concerned that adopting a 10 year term for the risk free rate when regulatory period is 5 years overcompensates businesses for the interest rate risk that they bear.[94] The AER decided against moving to a five year risk free rate at the time. It is relevant to ask whether the AER has raised this issue again because it has changed its mind, and if so, is this the sort of commitment that regulated businesses can expect of the AER when it undertakes its future WACC reviews; and

[93] The AER's proposals, however, are less transparent as it is advocating that the issue be decided upon at the next WACC review.
[94] AER, Issues Paper, Review of the weighted average cost of capital ("WACC") parameters, August 2008, page 31-33

- the ACCC previously adopted a 5 year tenor for its review of the 2004 access arrangement proposal for GasNet, but this was successfully appealed[95] by GasNet and subsequently reversed.

- The outcome of the GasNet appeal informed the basis for the approach to the nominal risk free rate in the NER in relation to both transmission and distribution networks. However, even prior to the GasNet appeal, jurisdictional regulators responsible for distribution determinations adopted a 10 year risk free rate in their decisions. The use of a 10 year nominal risk free rate is also widely accepted by the market practitioners. It is only recently, that regulators (e.g. IPART and the QCA) have chosen to diverge of accepted commercial practice and regulatory precedent by moving to a five year risk free rate.

- In the final decision for the first WACC review, CitiPower and Powercor, ETSA Utilities, SP AusNet and Envestra provided data (as part of a submission by the Joint Industry Association) to support the fact that the weighted average term of debt for regulated businesses (at the time of issuance) was 10.14 years on average.[96] The AER subsequently conducted highly detailed analysis on the information and determined that the weighted average effective term of the debt portfolios of these businesses (after taking into account floating rate debt and hedging costs) was 7.37 years.[97] On this basis, the AER concluded that "*there is not persuasive evidence to depart from the 10-year term assumption in calculating the debt risk premium.*"[98] The AER also accepted that for the average effective term at issuance to match the length of the regulatory period, the term-to-maturity of the long term bonds on issue by the benchmark businesses would need to shorten "*significantly*". The AER accepted that that "*such a shortening of debt maturities may increase refinancing risk for the benchmark efficient energy network business.*"[99]

It is apparent from the evidence presented above that the shift to a shorter term nominal risk free rate has been a contentious issue for some time and the AER has not had any success to date in mandating its adoption. It is therefore not unreasonable to ask whether the AER is now attempting to take the debate on a shorter term nominal risk free rate outside of the periodic WACC review.

6.4.3 Internal consistency and the cost of equity

The nominal risk free rate is an input to the expected cost of equity for the purposes of determining WACC. Any change to the term of the risk free rate will therefore impact also on the cost of equity. It is appropriate therefore to consider whether such a change is justified.

The FIG considers that it is important to remind the AEMC that in the GasNet appeal, the Australian Competition Tribunal determined that a 10 year term should be used for the risk free rate throughout the CAPM formula.

Two reasons were advanced to support this approach:

- The first reason was consistency within the CAPM formula. This issue relates to the fact that the nominal risk free appears twice in the formula for the CAPM cost of equity.

[95] Australian Competition Tribunal, Application by GasNet Australia (Operations) Pty Ltd [2003] ACompT 6, 23 December 2003
[96] AER, Final Decision, Electricity Transmission and distribution network service providers, Review of the weighted average cost of capital ("WACC") parameters, May 2009, page 143
[97] AER, Final Decision, Electricity Transmission and distribution network service providers, Review of the weighted average cost of capital ("WACC") parameters, May 2009, page 164
[98] AER, Final Decision, Electricity Transmission and distribution network service providers, Review of the weighted average cost of capital ("WACC") parameters, May 2009, page 165
[99] AER, Final Decision, Electricity Transmission and distribution network service providers, Review of the weighted average cost of capital ("WACC") parameters, May 2009, page 165

Therefore, any change in the nominal risk free rate would also create a corresponding change in the definition of the market risk premium ("MRP"), which is measured by reference to the risk free rate.

The Tribunal noted that whilst estimates have to be used in the absence of perfect information, it is necessary to preserve the underlying logic of the CAPM when applying the model:

"While it is no doubt true that the CAPM permits some flexibility in the choice of the inputs required by the model, it nevertheless requires that one remain true to the mathematical logic underlying the CAPM formula. In the present case, that requires a consistent use of the value of rf in both parts of the CAPM equation where it occurs so that the choice was either a five year bond rate or a ten year bond rate in both situations."[100]

On this basis, the Tribunal concluded that the ACCC "*erred in concluding that it was open to it to apply the CAPM in other than the conventional way …"*[101]

- On the choice of a five or ten year term for the risk free rate, the Tribunal found that a ten year term was consistent with conventional use of the CAPM:

  "In truth and reality, the use of different values for a risk free rate in the working out of the Rate of Return by the CAPM formula is neither true to the formula nor a conventional use of the CAPM. It is the use of another model based on the CAPM with adjustments made on a pragmatic basis to achieve an outcome which reflects an attempt to modify the model to one which operates by reference to the regulatory period of five years. The CAPM is not a model which is intended to operate in this way. The timescales are dictated by the relevant underlying facts in each case and for present purposes those include the life of the assets and the term of the investment.

  The Tribunal is satisfied that the use by GasNet of a ten-year Commonwealth bond rate to determine a Rate of Return on equity … was a correct use of the CAPM and was in accordance with the conventional use of a ten year bond rate by economists and regulators where the life of the assets and length of the investment approximated thirty years in the MRP calculation and the risk-free rate. The use of the CAPM with these inputs in the Tribunal's view, produces a Rate of Return on equity which s8.31 treats as one commensurate with the relevant market conditions and risk …"[102]

The FIG notes that the AER's rule change proposal has been silent about how it intends to address the corresponding change that would be required to the MRP if the term of the nominal risk free rate is to be shortened. The AER has, however, noted that consistency between the term of the risk-free rate and the estimate of the MRP was an important issue at the first WACC review.[103] The FIG notes that a submission by the Joint Industry Association at the time suggested that an adjustment of 20 basis points was appropriate.

6.4.4 Re-financing risks

As noted earlier in this section, there is evidence to suggest that regulated businesses have in the past tended to raise long term debt where possible. However, accessibility to cost-competitive long term debt has been reduced since the GFC. As result, regulated businesses

[100] Australian Competition Tribunal, Application by GasNet Australia (Operations) Pty Ltd [2003] ACompT 6, 23 December 2003, para. 46.
[101] Australian Competition Tribunal, Application by GasNet Australia (Operations) Pty Ltd [2003] ACompT 6, 23 December 2003, para. 47.
[102] Australian Competition Tribunal, Application by GasNet Australia (Operations) Pty Ltd [2003] ACompT 6, 23 December 2003, para. 47 - 48.
[103] AER, Final Decision, Electricity Transmission and distribution network service providers, Review of the weighted average cost of capital ("WACC") parameters, May 2009, page 170.

have had to raise shorter term debt as a matter of necessity.[104] This practice, however, entails significant re-financing risks which stems from the risk that businesses may not be able to raise new debt as and when existing debt matures.

In the current post-GFC environment, there can be significant re-financing risks associated with having to replace maturing debt more frequently. Such risk is ultimately borne by equity holders, who will raise their required return on equity to levels commensurate with the additional risk exposure.

The FIG considers that such risks must be taken into account by the AER in setting the rate of return, if it is to measure the cost of debt by reference to a term shorter than 10 years.

6.4.5 Incentive regulation vs. micro-management

The FIG notes that depending on how closely the allowed cost of debt is defined to mirror the actual cost of debt, this could be effectively construed as a move away from the "benchmark" approach, which is an important cornerstone of incentive regulation. This is a risk particularly with the AER's rule change proposal given that it has not provided any details about the methodology or approach that it expects to apply in its approach to estimating the actual cost of debt.

The FIG is aware, however, that in some of the Regulatory Information Notices ("RIN") that the AER has issued recently to regulated businesses, the AER has requested what could only be described as an extensive amount of information relating to the nature and amount of debt held by the business. This includes (but is not limited to) details about:

- where the debt was issued;
- whether the debt is senior or subordinate;
- whether fixed or floating interest rates are payable, and what the effective rates are if they are altered by financial instruments;
- whether the interest rates have been altered by the presence of internal debt administration charges;
- the schedule for payments of interest and principal; and
- whether the debt includes any embedded options, making it callable, putable or convertible, and if so, the nature of those options.

Although the AER's rule change proposal states that its approach to estimating the cost of debt will be determined as part the WACC review, this evidence suggests that the AER may adopt a highly forensic approach to its analysis of the allowed cost of debt.

Even if that is not the intention, past experience with regulation suggests that, there is a risk this approach will end up being highly forensic, because there will always be an overtly reasonable rationale just to make the approach 'just a bit more cost reflective'. Moreover, some businesses or consumers who are adversely affected by the current approach will inevitably advocate tweaking the system to make it 'more cost reflective'. Once such a dynamic is created, it inevitably leads to more cost based regulation.

Such an approach would only take the regulatory framework away from an incentive regulation regime towards one that is characterised by micro-management.

[104] Some of the FIG's members would also typically have hedging arrangements which expire 6 months prior to the time debt facilities mature, which means that refinancing will need to occur six months earlier.

6.5 The costs and benefits of the rule change proposals

An embedded cost of debt approach such as that proposed by the EUC would result in lower allowed cost of debt for regulated businesses in the current environment. However, the FIG notes that in a falling interest rate environment, the allowed cost of debt would fall at a slower rate and this could be an attractive proposition for some businesses, provided that it was written into the rules to ensure that the approach would not be abandoned at such times.

The AER's approach is somewhat difficult to evaluate since the details are missing. The FIG agrees that removing the fixed principles around the cost of debt which are currently in the rules may, as the AER highlights, create more opportunity for regulated businesses to debate how the cost of debt should be determined. However, it will also create uncertainty for regulated businesses, which will be repeated at every WACC review.

The AER's rule change proposal states that once the definition and methodology for estimating the cost of debt is set out in the SoCC, it will provide clarity and certainty for stakeholders for the life of that statement. This may be true however, investors have more certainty now over the cost of debt as it is prescribed in the rules, so they are in effect giving up the long term certainty they enjoy now in return for increased uncertainty every five years when the AER undertakes its WACC review and could change the calculation. It can also change its methodology at each WACC review, particularly if the persuasive evidence test is removed.

6.6 Alternatives to the rule change proposals

The FIG submits that the following considerations should be taken into account in assessing any changes to the rules in relation to the cost of debt and the DRP:

The FIG concedes that measurement of the DRP in accordance with the provisions in the NER is difficult due to the lack of available data. However, the evidence presented in Figure 6 suggests that this may be a cyclical issue. To the extent that it reflects a cyclical issue, a rule change may not be warranted and the 10 year benchmark should be retained. To address the measurement issue under such circumstances, consideration could be given to estimating the 10 year cost of debt by reference to 5 year corporate bonds, plus an appropriate proxy for the spread between 5 and 10 year BBB+ corporate bonds. The FIG acknowledges the methodology is far from perfect, however, in the absence of market evidence, it is may represent a second-best approach.

- In circumstances where retaining the 10 year BBB+ corporate bond benchmark is problematic due to lack of available market data, the FIG would support a decision to relax the benchmark assumptions in order to achieve a broader sample. This would need to be undertaken by way of a stepped approach and would need to ensure that at all times, the benchmark is defined in a way which remains representative of the broader credit characteristics of the industry.

- If consideration was to be given to relaxing the Australian corporate bond benchmark assumption to include the price of overseas corporate bond issues of a 10 year tenor, it would be necessary to ensure that all the risks associated with an Australian entity issuing offshore debt are appropriately taken into account. The FIG is of the view that this is likely to be particularly challenging, because of the risks in borrowing long term in foreign currencies and the complex arrangements businesses have in place to manage these risks. The complexity has similarities to the process of estimating an equity beta. In estimating the equity beta, local data is typically preferred as this preserves the relationship between the Australian stock and the local market index. However, in the case of foreign exchange risk management practices, there is likely to be even more limited data on which to make the necessary adjustments.

- Primacy should be given to ensuring that the mathematical logic of the CAPM is preserved in addressing measurement issues. This means that if the nominal risk free rate is to be based on a five year term to address measurement issues relating to the cost of debt, corresponding adjustment is made to the cost of equity to ensure that the MRP is measured appropriately and the additional re-financing costs associated with shorter term financing are taken into account.

- The cost of debt should continue to reflect an Australian "benchmark" approach, with the benchmark being defined in a way that is not contrary to the concepts which underpin incentive regulation. In principle, the FIG is not entirely opposed to an embedded cost of debt approach,[105] however, we would not support an approach which is intrusive and undermines the benefits of incentive regulation. From the FIG's perspective, private businesses respond efficiently to commercial incentives, both through schemes to share reduced costs with consumers, improve price signals and to provide improved reliability or other outcomes valued by consumers. A shift from the current benchmark approach to WACC to one that is based on the individual circumstances and actual costs of a particular firm risks removing the incentive for private firms to finance their activities on the most efficient basis possible.

[105] This does not mean that the FIG supports the EUC's specific approach to the calculation of the embedded cost of debt. In particular, the FIG has reservations about the weights used in the EUC's proposed cost of debt formula.

7. Rule change proposals: non-capital costs

7.1 Summary

This section addressed the AER's various proposals for electricity that relate to non-capital costs, including:

- the capex and opex expenditure framework, including the process for developing expenditure forecasts;
- expenditure incentives on electricity networks to spend no more than is necessary and efficient; and
- streamlining the regulatory determination process, partly to ensure more stakeholder engagement.

This submission focuses on the AER's key proposals. In summary, the evidence does not support the AER's definition of the problem nor therefore their proposals. In particular, there is no evidence to suggest that:

- the AER has been constrained by the current rules and thus unable to reduce the businesses' expenditure forecasts by as much as its predecessors. Indeed, the evidence suggests that it has reduced the businesses' forecasts by essentially the same amount as its predecessors; and
- 'overspending' on capex is, or ever has been, a systemic problem in the regulatory regime. Indeed, there is no evidence of material overspending on capex (or opex) by any privately owned network business.

In both cases, the AER has relied on selective evidence. If it had relied upon a broader pool of evidence in its analysis, it is likely that the AER would have arrived at a different conclusion about the existence of a problem. In the FIG's view, it illustrates to the AEMC how the AER's performance difficulties have developed.

7.2 Capex and opex framework

The AER has a number of proposals relating broadly to the framework for setting capex and opex in electricity network regulation. This includes a proposal which seeks to amend the decision making test the AER is required to apply when setting capex and opex expenditure benchmarks, and proposals to amend various related rules.

7.2.1 The problem

The AER identifies three issues with the rules:

- *"The requirement that the AER accept a forecast if it 'reasonably reflects' the required expenditure*
- *The limits on the regulator amending a proposed forecast only to the extent necessary to make it fall within the range that 'reasonably reflects' the required expenditure (applies only to chapter 6)*

- *The requirement that the regulator must base any substitute on the original regulatory proposal (applies only to chapter 6)."*[106]

The AER argues "... *the process for determining forecasts of required capex and opex are* (sic) *prescriptive and include significant limitations on the regulatory judgement that can be exercised relative to what was available to previous jurisdictional regulators and the ACCC."*[107]

The AER also argues that: *"Even if there is a lower possible forecast that is efficient, prudent and realistic, the rules operate to exclude the AER from setting that lower forecast."*[108]

The AER also notes that:

- the current approach was developed after a long period of debate but maintains that it always held the view that the current approach was misguided;

- the restrictions are particularly relevant to distribution businesses and require it to do a line by line analysis of capex programs which preclude adopting a more top-down approach and relying more on benchmarking; and

- the 'propose-respond' and 'consider-decide' labels that are sometimes associated with the two approaches (i.e. the existing and its preferred model) are not particularly helpful. This is because both start with the businesses' proposal, but the latter would give the AER the ability *"where necessary to determine appropriate substitute amounts."*[109]

The AER concludes that the current framework "*has led to upwardly biased expenditure forecasts when compared to other more widely used regulatory models."*[110] In respect of distribution it concludes that *"there is no possible result than an estimate that is at the top of the range."*[111]

In short, the AER appears to be arguing that in setting capex and opex benchmarks that:

- its discretion is unduly constrained, particularly for distributors; and

- this has resulted in it accepting higher benchmarks than would otherwise be the case.

It also seems to imply that this might be encouraging businesses to inflate artificially their expenditure forecasts.

7.2.2 The evidence relied upon

The evidence relied upon by the AER is as described in Section 3.1. In short:

- an opinion by Stephen Lloyd SC;

- evidence that the regime is significantly different to that adopted in the preceding state-based regulatory regimes and those in other countries; and

[106] AER, op. cit., September 2011, page 27
[107] Ibid., page 25
[108] Ibid., page 25
[109] Ibid., page 30
[110] Ibid., page 28
[111] Ibid., page 29

- evidence that under the current framework, there have been significant increases in capex and opex benchmarks in final determinations. In particular, it notes that on average compared to the previous regulatory period, this period's:
    - capex forecasts were 84% higher than actual capex;
    - capex benchmarks (or allowances) were 64% higher than actual capex; and
    - opex forecasts were 34% higher than actual opex.

The first two pieces of evidence are dealt with in Section 4.

In respect of the AER's empirical evidence, the FIG makes the following observations:

- It is not obvious what the relationship between actual capex in a previous regulatory period and the capex proposals put forward by the businesses to the AER in the current period actually represents. To the extent it says anything; it does not appear to say anything about the AER's capacity to reduce the proposed capex in its determination. By including this as evidence, the AER appears to be implying that there is some relationship between the current rules and the extent to which forecast might deviate from previous actual, but it does not appear to make this claim directly.

- The AER observes that capex benchmarks (or allowances) in this period are significantly above actual capex in the previous period and indicates that this suggests a step change has occurred. It goes on to say that there are legitimate changes for "*some increases*" but does not indicate how large this is nor has it provided any evidence that the remaining possibly "non-legitimate" step change represents inefficient expenditure.

- A more relevant variable for assessing if the AER is constrained in respect of its ability to assess capex and opex proposals might be the extent to which the AER has reduced capex and opex forecasts in its benchmarks compared to its predecessors, as this goes to the AER's core complaint.[112] Unfortunately, the AER does not provide any of the actual evidence that might support it. The reasons for this oversight are not obvious; but in any event, it is perhaps fortunate given the analysis that the FIG has undertaken in relation to this matter.

- The AER makes no mention of opex benchmarks compared to actual (or forecast opex).

7.2.3 Other evidence worth considering

As noted above, the empirical evidence provided by the AER does not appear to support the problems that it has identified. If the current rules are in fact constraining the AER in its assessment of capex and opex proposals, this would manifest in the extent to which the AER has managed to reduce capex and opex proposals as compared with its predecessors.

The FIG has therefore compiled the relevant evidence from regulatory determination documents to compare proposed forecasts, regulatory allowances and actual expenditures for capex and opex for each NSP.[113] It shows that:

- In determining expenditure benchmarks (or allowances), the AER reduced:

[112] It is possible that the AER believes that it would have cut back further than its predecessors if it had been the relevant decision making authority when the preceding rules were in place, but that is not a testable hypothesis.
[113] Information was primarily sourced from AER and Australian Competition Tribunal regulatory determinations, ACCC regulatory decisions for TNSPs and distribution determinations made by jurisdictional regulators. Proposed forecast and actual expenditure amounts were also sourced from the NSP's regulatory proposals / submissions. In the case of Victoria and South Australian DNSPs, actual capex and opex sourced from regulators' annual performance reports.

- Total capex proposals of NSPs by 11%
- Total opex proposals of NSPs by 8%.

- In comparison, the previous regulators reduced:
  - Total capex proposals by 10%
  - Total opex proposals by 6%.

This evidence does not support the AER's claims that its ability to assess capex / opex proposals has been constrained under the rules.

7.2.4 The costs and benefits of the rule change proposals

The AER's rule change proposals are directed at giving it wider discretion to reduce perceived inefficient expenditure proposed by NSPs and to achieve this will less accountability. It is apparent that the AER believes that this will allow it to reduce inefficient expenditure by more than it perceives it is currently able to.

The FIG would dispute the AER's implication that it would ever be in an appropriate position to 'decide' what appropriate expenditure forecasts would be. It is not in a good position to make this decision. In such an environment, the FIG would also be concerned if the businesses were exposed to the risk of failures in service performance. This goes to the issue of regulatory discretion and accountability.

7.2.5 Alternatives to the rule change proposals

The FIG does not believe that the rule change proposals are, as a matter of principle, necessary to provide the AER with the discretion to undertake its role. In terms of the precise rule change proposals that relate to distribution, it would defer to the views of its asset companies.

Before rule changes are considered the AER, the FIG would like to see the AER embark on a more concerted and transparent effort to improve its performance.

7.3 Capex incentives

The AER has a number of proposals relating broadly to incentives in respect of capex. This includes how capex in excess of that allowed is treated when the opening regulatory asset base ("RAB") is set for the next regulatory period (i.e. the mechanism used to roll forward the asset base), and various related matters.

This submission focuses on the proposal relating to the treatment of capex 'overspend'.

7.3.1 The problem

The AER states "*the RAB must be adjusted to include all capex incurred during the previous regulatory period. NSPs are not required to restrict expenditure in order to remain within the capex forecast set at the previous determination. There is no ex post review of capex.*"[114]

The AER notes that incentives to ensure that only efficient investment occurs may not be sufficiently strong, and that this is particularly an issue where *"the regulated cost of capital*

[114] AER, op. cit., September 2011, page 38

(or rate of return) is higher than the actual cost of capital for the NSP, or where the NSP is responding to a broader range of incentives, rather than just financial incentives." [115]

The AER concludes that:

"The current RAB roll forward mechanism creates incentives for network services providers to incur more than effective levels of capex in some circumstances, particularly in the latter stages of the control period."[116]

...

"…the underlying theoretical incentive properties of the current framework, combined with actual outcomes, make a strong case in favour of strengthening the incentives on NSPs to incur only efficient capex." [117]

In short, the rules encourage the businesses to overspend on capex, particularly where the cost of capital is 'too high' or the businesses are responding to *"broader"* incentives. The rules also do not provide consistent incentives over the regulatory period in this regard.

7.3.2 The evidence relied upon

The evidence the AER relies upon to support its proposals is twofold:

- that during the most recent round of regulatory resets some the businesses in NSW and Qld significantly 'overspent' relative to their regulatory benchmarks; and
- that the rule is theoretically flawed in the incentive it creates.

The FIG has a number of observations regarding the AER's empirical evidence and theoretical argument.

The AER's empirical evidence is notable for several reasons.

The AER provides a selective sample on which to judge *"actual outcomes"* – the performance of the Government owned businesses in NSW and Qld. The FIG is not sure why the AER would rely on such a selective sample to draw broader conclusions about the incentives properties of this aspect of the regulatory regime. If it had relied upon a broader pool of evidence in its analysis, it is likely that the AER would have arrived at a different conclusion about the existence of a problem.

It is also worth noting that the AER makes no mention of the broader performance of these businesses. In particular, whether their actual capex reflected what they originally forecast and whether they overspent on opex as well.

Putting that issue aside momentarily, however, it is apparent that if the AER had drawn a different sample, it would have observed different outcomes and would have likely drawn different conclusions.

Data on the actual capex and opex incurred by NSPs in the current regulatory period (i.e. undertaken by the AER) is not available to us. The FIG has therefore been unable to test the robustness of the AER's conclusions (e.g. by including more businesses than the Government owned NSPs in NSW and Qld).

However, the FIG notes that the electricity distribution businesses in Victoria and South Australia have always operated under a regime where the regulator did not undertake an *ex*

[115] Ibid., page 38
[116] Ibid., page 39
[117] Ibid., page 40

post review of capex. The FIG considers that there is some merit in considering the expenditure performance of these distribution businesses in the previous regulatory period (where a full set of data is available).

Based on the FIG's analysis, in the previous round of regulatory determinations, the Victorian and South Australian distribution businesses, in aggregate:

- 'Overspent' their capex allowances by 1%
- Spent 10% less than their opex benchmarks.[118]

These results suggest that a very recent example of a regulatory regime in Australia without an *ex post* review of capex which did not result in significant expenditure overspends.

The AER has acknowledged this performance in respect of the Victorian electricity distribution businesses, noting that *"over the past two regulatory control periods (10 years), the Victorian DNSPs' actual expenditures have been less than those forecast by the firms and less than the allowances set by the ESCV (although this has varied between businesses and regulatory years)"*. The AER also acknowledged that the Victorian DNSPs distributors businesses *"maintained relatively high standards of service"* and compare favourably with those businesses in other states from an efficiency perspective.[119]

In short, the AER's assertions appear to be accurate only if the sample is restricted to Government-owned NSPs.[120]

The empirical evidence has direct implications for the AER's theoretical argument. It seems to argue that the businesses generally have an incentive to 'overspend' on capex, especially towards the end of the regulatory period. The AER then argues that this incentive to 'overspend' is particularly strong where:

- the regulated cost of capital is 'too high'; and
- the businesses are responding to *"broader"* incentives.

The empirical evidence would appear to be inconsistent with the first explanation, but may be consistent with the second. In short:

- the evidence the AER chooses to rely on is highly selective and provides an inaccurate representation of the situation; and
- the actual evidence, on the AER's own analysis, suggests that the businesses concerned are responding to *"broader"* than financial incentives. The FIG is not sure what these incentives are, but notes that the AER might not be in a strong position to address them (i.e. if they are non-financial and thus broader than the remit of economic regulation).

Given this, it is not obvious that the AER has demonstrated the case for its rule change proposals.

7.3.3 Other evidence worth considering

More broadly, on a theoretical level, the AER raises two arguably related issues:

---

[118] As a further point of comparison, the FIG's analysis shows that in the previous round of regulatory determinations, Government owned businesses 'overspent' on capex by 35% and on opex by 9%.

[119] AER, Final decision on Victorian electricity distribution network service providers – Distribution determination 2011-2015, October 2010, page II

[120] The Aurora Energy distribution and Powerlink transmission networks are excluded from the analysis as the AER is currently in the process of making the first determinations under the current framework for these businesses.

- it implies that the incentive 'problem' exists independent of the factors that make it particularly strong; and

- it argues that a cost of capital that is 'too high' particularly encourages capex 'overspend'.

The AER does not explain why the incentive problem exists more generally. It is also not clear whether the AER believes the 'overspend' issue exists regardless of the forecast (i.e. would a business spend up to its capex benchmark if it had a choice not to do so?), or is in part a function of it.

The AER then makes a broad assertion about the source of the problem (i.e. that the regulated cost of capital is 'too high'). Even if this were true (see below), then the solution ought to lie in the process which the cost of capital is set,[121] not to make an adjustment to a different aspect of the regulatory framework.

The FIG would argue that no commercial business would spend a dollar more on capex than it has to (regardless of whether it has been allowed for or not), if the cost of capital is appropriate. There is no reason to do so, unless by not investing the business risks incurring higher costs. The risk of breaching the capex benchmark might increase this pressure at the margin because:

- the investment has not been funded (i.e. the business has structured its finance to expected investment only) and accessing the extra funding is likely to be costly[122], or

- a failure to invest beyond a benchmark, but which resulted in falling service levels, might provoke a regulatory or political response, which may have its own risks or costs.

In addition, a cost of capital that was 'too high' would only support capex overspend if:

- it was systematically too high (i.e. not a function of cyclical factors); <u>and</u>

- investors could reasonably expect it to stay too high for at least the medium term (i.e. at least several regulatory periods).

Only in these circumstances would it make sense to reallocate capital away from the investor and into 'unnecessary' capex. If this were the case, the incentive to defer capex to the end of the regulatory period would also be redundant.

7.3.4 The costs and benefits of the rule change proposals

Putting all these issues aside, the FIG has a number of concerns with the AER's proposed solution. From the FIG's perspective, the capex overspend sharing mechanism that the AER has proposed is less likely to impact on privately owned businesses, but there is a risk it could do so, particularly given the increasing need for substantial investment in their networks and the risks posed by the AER proposed rule changes. That risk has a cost.

The FIG notes that the AER has observed that one alternative is the *ex post* regime that is used in the gas industry, but has rejected it (but perhaps surprisingly is not proposing to

[121] The AER has proposed changes to the way the cost of capital is set, but not for the reasons put forward to support the capex/opex rule change proposals.

[122] The privately owned businesses compete in a tight capital market for funds. To attract that finance they have to offer attractive returns. Given the nature of the assets in question, one key way they can do this is to finance themselves very efficiently. In practice, this means selecting an optimal level of gearing that will provide the returns the market is seeking, whilst minimising the exposure to the risk of unforeseen developments (obviously the last few years has seen that optimal level of gearing move downwards). Finding the additional capital in these circumstances is not an easy or simple process. Such finance is not going to be raised and spent on capex that is unnecessary.

repeal it in gas). The AER's rejection of an *ex post* regime may in part be because it has observed in the past that:

"The AER considered that regulated utilities face a lower degree non-diversifiable business risk, compared to the market, which is primarily driven by the stable cash flows of regulated utilities. This in turn is driven by both the nature of the industry, such as the relatively high demand inelasticity of electricity to price, and by the protection of the regulatory regime.

The regulatory regime for electricity transmission and distribution network service providers includes design features such as:

...

The rolling forward of the service provider's RAB, rather than the re-valuing or re-optimisation of the RAB at each reset. Under the ex-ante regime actual capex is rolled into the RAB, without any ex post prudency assessment. This approach means that at the end of each regulatory period a benchmark efficient NSP's prices and/or revenues are adjusted back to reflect their underlying cost base. This means that any increase in costs from forecast due to changes in GDP (which may effect (sic) *the growth in peak demand), or from changes in commodity prices are automatically rolled into the RAB. The AER considered this was highly likely to reduce exposure to systematic risk compared with the market in general."* [123]

The FIG believes that the retrospective assessment of capex is not consistent with providing incentives for efficiency, nor the certainty necessary to encourage investment. More simply, it encourages regulators to make decisions with the benefit of hindsight and information that was not available at the time the business needed to make the invest decision or the regulator approved it.

Unfortunately, the AER's capex overspend sharing mechanism has a number of problems:

- It is highly arbitrary – at least the *ex post* framework provides the business with an opportunity to defend its decisions. In this sense, the AER's proposal creates more risk than the *ex post* framework.
- It is asymmetric – any 'underspend' only earns the cost of capital for the remainder of the regulatory period and any 'overspend' loses the cost of capital for the remainder of the regulatory period (and perhaps the cost of raising the additional unexpected capital). Under the proposed rule, any 'overspend' would attract the 40% penalty, but additional 'underspend' would receive no additional benefit. This risk asymmetry can only increase the risk the business faces in a way that is difficult to manage, and which could be exacerbated by the AER's proposal for wider discretion in setting capex benchmarks.
- Regulatory assurances that it will not be applied unreasonably (by virtue of the contingent projects, capex reopeners and pass through events) are both:
    - unlikely to provide investors with comfort that the scheme is not arbitrary; and
    - likely to highly complex and thus undermine the incentives it is intended to create.
- It will not solve the timing problem that the AER is also trying to address.

In other words, in the one area where the AER's proposals purport to rely more on incentives in practice, it is unlikely that this will be the outcome.

[123] AER, Final Decision on review of the weighted average cost of capital parameters for electricity transmission and distribution network service providers, May 2009, page 249

7.3.5 Alternatives to the rule change proposals

The FIG would welcome stronger incentives in respect of capex. If the AER wants to do this, one option may be to introduce an efficiency carryover mechanism for capex that is similar to that developed for opex. The rules allow the AER to establish such a mechanism for capex but it has not exercised this discretion. This would symmetrically strengthen the incentives to invest in capex efficiently, neutralise any incentive to defer capex within a regulatory period and provide more balanced incentives from a capex and opex optimisation perspective.

The FIG does not support the AER's rule change proposals in relation to capex overspend.

7.4 The efficiency of the regulatory process

The AER has proposed a number of procedural amendments to the electricity rules, which in its view, will enhance the efficiency and effectiveness of its decision making process.

The FIG would, for the reasons outlined in this submission, welcome changes to regulatory processes that would assist the AER in improving its performance.

The FIG is not well placed to provide a view on whether the AER's proposals would materially improve the efficiency and effectiveness of its decision making process. It would therefore defer to the views of its members' asset companies and the relevant industry associations on the merits of the precise rule change proposals.

The FIG would, however, reinforce its view that improvements in the regulatory decision making process are unlikely to be successful in the absence of a change in the approach of the regulator (i.e. a greater reliance on incentive regulation).

Appendix A The AER's performance in regards to merits review

1.1.1 AER decisions subject to appeal

Since 2008 when the existing review scheme came into effect under the electricity and gas laws, the AER has made economic regulatory decisions relating to 21 network service providers.[124] The decisions relating to 19 network service providers have resulted in appeals to the ACT.

1.1.2 Matters raised in appeals

In relation to those appeals upon which the Tribunal has issued a decision, a total of 41 matters have been raised by network service providers relating to a range of issues including the cost of capital, regulatory asset base ("RAB"), capital expenditure ("capex"), operating expenditure ("opex") and other matters (e.g. classification of services, public lighting, incentive schemes, etc.).

In addition, a further 14 matters have been raised by network service providers and have been granted leave to appeal by the Tribunal. A summary of this is provided in Table 1 below.[125]

The number and classification of matters raised as shown in Table 1 does depend on the extent to which individual matters are dissected. Multiple matters were raised in a number of appeals, for example in *Application by EnergyAustralia [2009] ACompT 7*, where 11 matters relating to various aspects of public lighting (including RAB, opex, price path issues, etc.) were originally raised by EnergyAustralia, but submissions to the Tribunal indicated that this was subsequently reduced to 6 matters after the AER conceded reviewable error in relation to some matters.[126] For the purposes of our analysis, we have regarded each matter as a separate ground and classified all 11 matters in this instance under "Other" matters. It should also be noted that although the ACT's decision on the value of imputation credits was released in three decisions (dealing with the value of "theta" separately from the distribution rate), for the purposes of our analysis, we have counted these matters as one.

[124] Some of the electricity decisions have been made under transitional Chapter 6 rules of the NER which effectively lock-in some aspects of the jurisdictional regulatory arrangements previously applying to the NSPs.
[125] This report refers to the old names of the NSW electricity distribution businesses (EnergyAustralia, Integral Energy and Country Energy) for ease of communication.
[126] Application by EnergyAustralia [2009] ACompT 7 (Oct 2009), para 25

Table 1: List of matters raised in appeals

Decision/Date	Appellants	Number of Matters in Dispute			
		Cost of capital [127]	RAB	Capex/ Opex	Other
1. Tribunal issued a decision					
Re: Application by ElectraNet Pty Limited No. 3 [2008] ACompT 3 (Sep 2008)	ElectraNet		1		
Application by EnergyAustralia [2009] ACompT 7 (Oct 2009)	EnergyAustralia				11
Application by EnergyAustralia [2009] ACompT 8, Corrigendum (Nov 2009)	EnergyAustralia TransGrid Integral Energy Country Energy Transend	2 2 2 2 2		1 1	
Application by ActewAGL Distribution [2010] ACompT 4 (Sep 2010)	ActewAGL	1			
Application by Ergon Energy Corporation Limited [2010] ACompT 6 (Oct 2010)	Ergon Energy				1
Application by ETSA Utilities [2010] ACompT 5 (Oct 2010)	ETSA Utilities		1		
Application by Ergon Energy Corporation Limited (Customer Service Costs) (No. 2) [2010] ACompT 10 (Dec 2010)	Ergon Energy				1
Application by Ergon Energy Corporation Limited (Labour Cost Escalators) (No. 3) [2010] ACompT 11 (Dec 2010)	Ergon Energy			2	
Application by Ergon Energy Corporation Limited (Non-system property capex) (No. 4) [2010] ACompT 12 (Dec 2010)	Ergon Energy			1	
Application by Ergon Energy Corporation Limited (Service Target Performance Incentive Scheme) (No. 5) [2010] ACompT 7 (Mar 2011)	Ergon Energy				1
Application by Ergon Energy Corporation Limited (Street Lighting Services) (No. 6) [2010] ACompT 14 (Dec 2010)	Ergon Energy				1
Application by Jemena Gas Networks (NSW) Ltd (No. 3) [2011] ACompT 6 (Feb 2011)	Jemena Gas Networks		1	1	1
Application by Energex Limited (No. 5) [2011] ACompT 9 (May 2011)	Energex Ergon Energy ETSA Utilities	1 1 1			
Application by Jemena Gas Networks (NSW) Ltd (No. 5) [2011] ACompT 10	Jemena Gas Networks	2			
Total decisions issued by Tribunal		16	3	6	16
2. Tribunal granted leave					

[127] For the purposes of our analysis, disputes relating to the value of imputation credits ("gamma") are classified as a cost of capital matter, even though in the building block model, the value of gamma impacts on the cost of tax.

Decision/Date	Appellants	Number of Matters in Dispute			
		Cost of capital [127]	RAB	Capex/ Opex	Other
Application by APT Allgas Energy Pty Ltd [2011]ACT 5 of 2011	APT Allgas	1			
Application by Envestra Limited [2011] ACT 6 of 2011	Envestra (QLD)	2			
Application by Envestra Limited [2011] ACT 7 of 2011	Envestra (SA)	2		2	
Application by WA Gas Networks Pty Ltd (No. 1) [2011] ACompT 14	WA Gas Networks	2		3	2
Total appeals granted leave		7	0	5	2
Total matters raised in appeals		**23**	**3**	**11**	**18**

Source: Australian Competition Tribunal

Putting aside the large number of "other matters" raised, which is affected to a large degree by the 11 separate matters raised in *Application by EnergyAustralia [2009] ACompT 7*, issues relating to the cost of capital have accounted for a significant proportion of total matters raised.

This result should be viewed in the context of the fact that the AER's Determination on the Cost of Capital for electricity transmission and distribution businesses ("WACC Decision"), which was completed in May 2009, and which set the values (and methodology) for a range of cost of capital parameters, is not itself a reviewable regulatory decision under the national electricity laws. As such, it is only possible for the network service providers affected by the WACC Decision to dispute the AER's decision once their economic regulatory determination had been made.

Aspects of the cost of capital which have been subject to appeal relate to:

- the averaging period for the risk free rate;
- the debt risk premium ("DRP");
- the market risk premium ("MRP"); and
- the value of imputation credits.

1.1.3 Appeal outcomes

Of the 41 separate matters which have been contested by network service providers under the national energy laws, 25 matters have been decided by the Tribunal in favour of network service providers[128] and 5 were conceded by the AER.

Table 2 below sets out our analysis of the instances where this has occurred.

[128] It should be noted that the count of the number of the matters decided in favour of each applicant in this report may vary from other independent analysis which may have been undertaken, depending on how the number of separate matters are counted, how the Tribunal's decisions are dissected and whether matters where the AER has conceded before the Tribunal's hearings are included. Differences can arise in decisions where there are multiple factors affecting one ground for review, as the Tribunal has in some instances decided in favour of the applicant on one factor but in favour of the regulator on other factors.

Table 2: Outcome of appeals

Decision	Applicant	Outcome	Matters won by applicant[129]
Re: Application by ElectraNet Pty Limited No. 3 [2008]ACompT 3 (Sep 2008)	ElectraNet	AER erred in material factual finding because easement acquisition or transaction costs not included in ElectraNet's opening RAB – Tribunal satisfied that material showed proper foundation for determining appropriate adjustment to opening RAB for those costs	1
Application by EnergyAustralia [2009] ACompT 7 (Oct 2009)	EnergyAustralia	Reviewable error found in relation to one matter – A number of matters were remitted to the AER for consideration	6
Application by EnergyAustralia [2009] ACompT 8, Corrigendum (Nov 2009)	EnergyAustralia TransGrid Integral Energy Country Energy Transend	Incorrect exercise of discretion by AER to withhold consent in relation to applicants' proposed averaging period for the risk free rate – No reviewable error by AER in relation to reliance on Bloomberg data for estimating the cost of debt – AER decision on EnergyAustralia's opex affirmed – AER's decision on TransGrid's opex set aside and remitted to AER for reconsideration.	1 2 1 1 1
Application by ActewAGL Distribution [2010] ACompT 4 (Sep 2010)	ActewAGL	AER not at fault in its decision to exclude certain data from some data sources from consideration – It was unreasonable for the AER not to consider whether useful information could be obtained from consideration – AER made an error in not properly considering whether a specific was anomalous and should have been excluded	1
Application by Ergon Energy Corporation Limited [2010] ACompT 6 (Oct 2010)	Ergon Energy	AER made an error of fact in its findings of fact that the applicant's costs would not be efficiently incurred in delivering quoted services – AER also made an error of fact that the applicant did not provide sufficient information	1
Application by ETSA Utilities [2010] ACompT 5 (Oct 2010)	ETSA Utilities	AER incorrectly exercised its discretion in deciding not to consider information on the valuation of easements submitted to it by the applicant.	1
Application by Ergon Energy Corporation Limited (Customer Service Costs) (No. 2) [2010] ACompT 10 (Dec 2010)	Ergon Energy	No reviewable error found on the part of the AER – AER decision reaffirmed.	0
Application by Ergon Energy Corporation Limited (Labour Cost Escalators) (No. 3) [2010] ACompT 11 (Dec 2010)	Ergon Energy	AER made an error of fact and incorrect exercise of discretion in relation to the real cost escalator for the first year of the regulatory period – Tribunal reaffirmed AER's decision to reject the applicant's internal labour costs for the remainder of the regulatory control period.	1
Application by Ergon Energy Corporation Limited (Non-system property capex) (No. 4) [2010]	Ergon Energy	Tribunal found for the applicant – AER's approach to establishing the economic efficiency of a project was not logical	1

[129] Including matters conceded by the AER.

Decision	Applicant	Outcome	Matters won by applicant[129]
ACompT 12 (Dec 2010)			
Application by Ergon Energy Corporation Limited (Service Target Performance Incentive Scheme) (No. 6) [2010] ACompT 7 (Mar 2011)	Ergon Energy	No grounds for review established under Sec 71C(1) of the NEL – No error by AER	0
Application by Ergon Energy Corporation Limited (Street Lighting Services) (No. 6) [2010] ACompT 14 (Dec 2010)	Ergon Energy	Tribunal found that the applicant was precluded from challenging the AER's decision to classify street lighting services as alternative control services.	0
Application by Jemena Gas Networks (NSW) Ltd (No. 3) [2011] ACompT 6 (Feb 2011)	Jemena Gas Networks	Reviewable error found in relation to the characterisation of mine subsidence expenditure in capex and terms of supply under the Reference Services Agreement – No error found in the AER's decision to reduce the applicant's opening capital base to remove the effect of the return on capital for the difference between estimated and actual capex in the 2005-2010 access arrangement period.	2
Application by Energex Limited (No. 5) [2011] ACompT 9 (May 2011)	Energex Ergon Energy ETSA Utilities	Tribunal's October and December 2010 decisions set the value of the distribution ratio at 0.70 – This decision set the value of 'theta' at 0.35 – On this basis, value of gamma set at 0.25.	1 1 1
Application by Jemena Gas Networks (NSW) Ltd (No. 5) [2011] ACompT 10	Jemena Gas Networks	Error found in relation to the AER's decision on the debt risk premium and gamma.	2
Application by APT Allgas Energy Pty Ltd [2011]ACT 5 of 2011	APT Allgas	Tribunal granted leave. No decision issued yet.	N/A
Application by Envestra Limited [2011] ACT 6 of 2011	Envestra (QLD)	Tribunal granted leave. No decision issued yet.	N/A
Application by Envestra Limited [2011] ACT 7 of 2011	Envestra (SA)	Tribunal granted leave. No decision issued yet.	N/A
Application by WA Gas Networks Pty Ltd (No. 1) [2011] ACompT 14	WA Gas Networks	Tribunal granted leave. No decision issued yet.	N/A
Total			**25**

Source: Australian Competition Tribunal