Submission to the Australian Energy Market Commission on Rule Change Proposals for the Economic Regulation of Network Services

December 2011

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Executive Summary

This submission is the Energy Users Association of Australia's (EUAA) response to the rule change proposed by the Australian Energy Regulator (AER) which seeks to change the economic regulatory frameworks for electricity and gas networks in the National Electricity Rules (NER) and the National Gas Rules (NGR). The submission also makes some comments on the Committee's Rule change proposals as well as on other significant related issues.

Electricity prices were relatively stable between 1980 and 2008. For example, prices only diverged between plus and minus 5 percent of the CPI. Since 2008, prices have risen sharply to around 40% higher than the CPI-see fig 2. The main driver of the significant increases has been increased transmission and distribution charges which make up approximately 50% of an electricity bill.

The first half of this submission identifies the problems that have resulted from recent AER determinations and provides data refuting the arguments supporting recent substantial network price increases given by the network businesses. It also looks at the views put forward by other parties about aspects of the current regulatory framework. The second half of the submission deals with the EUAA's response to the specific rule changes put forward by the AER.

The electricity Networks Service Providers (NSPs) have argued that the need to meet peak demand growth, the need to replace ageing assets and historical under-investment has resulted in the higher network prices. Analysis on behalf of the EUAA largely refutes these arguments and suggests that flaws in the regulatory framework and the way the framework has been administered by the AER along with ownership are the main reasons behind the massive increases in network charges. On the latter, government-owned electricity distribution networks were shown to be significantly less efficient than private ones and to have much larger price increases.

Is there a problem with the Rules?

The EUAA therefore submits that there are problems with the regulatory framework. This is discussed in Section 2. On the other hand, the NSPs have suggested that, to the extent that there is a problem, it is that the regulators have failed to apply the existing rules and to understand their businesses. They have been prone to error. On this logic, NSPs are

suggesting that even more generous regulatory settlements should have been made than have been made to them.

The NSPs have failed to respond to the evidence in the public domain (some of which is summarised in this submission) that rising demand, ageing assets and historic underinvestment do not adequately explain rising network expenditure and prices.

That these are problems with the regulatory framework has also been supported by other experts such as Professor Ross Garnaut in his Climate Change Review Update, 2011 and by the Independent Pricing and Regulatory Tribunal (IPART) in New South Wales, the Tamberlin Review and in the Parry-Duffy Report.

Comment on the AER's proposals

The AER has proposed changes to the electricity Rules that, for the most part, we support. In particular, we support the changes to restore the onus of proof on NSPs to justify their proposals rather than on the regulator to refute them and removing the presumption in favour of NSPs' proposals that the AER is required to observe.

The EUAA also supports the AER's proposal to strengthen the incentive on NSPs not to overspend their regulatory allowances, though we would welcome a broadening and investigating of options to overcome this.

However, the EUAA is less attracted to the AER's proposals to extend the "contingent project" and "re-opener" provisions (that currently apply to Transmission Network Supply Providers) to Distribution Network Supply Providers. These provisions would weaken the capital expenditure disciplines (why bother to constrain expenditure if a network can just apply to the AER for a contingent project or cost pass-through, or indeed apply to re-open the whole decision.

Furthermore these mechanisms may create moral hazard, encourage cost shifting and rent-seeking by NSPs.

The AER's proposals may also undermine the philosophy of price cap regulation by providing other ways in which NSPs may recover expenditure from consumers, other than through the main price control.

If the AER is concerned that NSPs might not be able to meet their reliability targets than we suggest that there are other ways to address this issue, for example, by strengthening

service standard incentives so that NSPs suffer material financial losses if they fail to meet reliability performance standards.

On the treatment of the Weighted Average Cost of Capital (WACC) or regulated rate of return allowed to NSPs, the AER has proposed changes, the effect of which is to leave all aspects of the determination of the WACC to the AER, through periodic reviews that the AER will conduct.

The EUAA does not agree with this proposal. Whilst the EUAA agrees that the methodology for estimating some of the parameters are flawed and in need of reform, the EUAA does not agree that the determination of the return on debt or the specification of the risk free rate should be part of the AER's WACC review. Moreover, a flawed existing methodology can also be corrected directly through changes to the Rules. The EUAA therefore supports the Rule change proposal by RCC. We find their argument compelling.

The EUAA is concerned that the methodology to be used by the AER in determining different parameters in the WACC during future review unknown. There is a risk that the new methodology adopted by the AER may not improve outcomes for energy users. There is also the additional issue that, if the new methodology used by the AER is inappropriate, energy users may not have any legal recourse to change it.

The EUAA agrees with the AER's proposal to eliminate the "persuasive evidence" clause from Chapter 6 – through this DNSPs have been able to appeal AER WACC decisions on the averaging period for the risk free rate and Gamma. Both appeals have favoured the NSPs and granted them almost $3 billion in additional revenue.

In addition, the AER has proposed various procedural changes and also changes to the weight it will place on confidential information provided by NSPs. The case for these changes is well made and we support the AER's proposals on this.

The EUAA is of the view that similar problems to those identified above exist in relation to the way the transmission networks are regulated under the National Electricity Rules (NER) and the way the gas networks are regulated in the National Gas Rules (NGR).

Other significant issues that are commented upon include: benchmarking, merit review and ownership issues.

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1. Introduction

The Energy Users Association of Australia (EUAA) welcomes the opportunity to provide a submission to the Australian Energy Market Commissions (AEMC) on the AER's proposed rule changes for economic regulation of network service providers.

The EUAA is a non-profit organization that represents the interests of its members on a range of energy policy and regulatory matters, including AER Network Service Provider (NSP) reviews. We have around 100 members, including many of the largest electricity users in Australia. Taken together, our members account for a significant share of the electricity consumed in the National Electricity Market (NEM). Network costs make up the largest single component of their energy costs (typically around half of their electricity costs for most of them and only slightly less for gas) and they have a keen interest in ensuring that these costs reflect the efficient performance of the transmission and distribution network service providers. On all these grounds, EUAA members therefore have a strong interest in the outcomes of the rule change process.

Based on prior involvement in these AER processes covering all major reviews to date and or own research work, we believe that the current framework that underpins the economic regulation of electricity and gas networks is flawed and in urgent need of reform.

The submission comments on the AER's proposals to change the Rules and also reflects on discussion and comments made during the AEMC's Public Forum in on 23 November 2011.

For the average electricity user, the charge for transporting electricity over the networks is more than 50% of the electricity bill. This charge (and its proportion of the final electricity bill) have risen dramatically over the last few years and will continue to do so for the next few years, following AER price/revenue control decisions. Inefficiencies in such a large part of the electricity industry adversely affect the productivity of the Australian economy and the welfare of its people. It redistributes income unfairly from consumers to the NSPs.

The EUAA understands and strongly supports that the basic intent of the regulatory framework is to achieve an outcome that is similar to that arising out of a competitive market. That is to say, in a competitive market, prices will be closely aligned with efficient costs. More specifically, the challenge is to design a regulatory mechanism for these NSPs to minimize their costs and to reveal their efficient costs to the regulator.

The EUAA submits that as yet we have not designed a mechanism powerful enough to incentivise NSPs to minimize costs or reveal those efficient costs to regulators. As a consequence, we have not replicated the outcome of a competitive market. Network prices and electricity prices are therefore higher than they need to be.

In his opening remarks at the AEMC's Public Forum, its Chairman John Pierce suggested that it is necessary to be realistic about the extent to which changes to the Rules can affect electricity prices. We recognise that this may well be a factor. However, we strongly urge the AEMC to strive to achieve this as far s possible through this rule change process and bear in mind the substantial evidence that the existing rules have flaws that are resulting in excessive network prices and therefore need to be corrected. Moreover, the current set of rules therefore cannot be satisfying the National Electricity Objective. A perfect design mechanism to replicate the competitive market is not yet available. A relevant question is how far a particular proposal moves us in the right direction.

We believe that regulatory design – for which the AEMC is significantly responsible in terms of the rules - is one part of the problem. Ownership and regulatory conduct are also critical.

At the Brisbane forum, John Pierce also alluded to the fact that investors in network utilities have an international investment market and so Australian network utilities are required to compete in that market to attract investment. We agree with this, certainly in respect of the 25% of the NSP sector in the NEM that is privately owned (obviously the same competition for capital does not exist in the 75% of the industry that remains government-owned). More generally, however, we urge the AEMC to conduct comparative analysis into the regulated rate of return on debt and equity (and actual rates of return achieved) and also into the design of incentives that apply in the economic regulation of electricity networks in other countries, with those that apply in the NEM.

The rest of this submission proceeds as follows:

- Section 2 examines evidence supporting our view that a problem in relation to the regulation of NSPs exists and that the rules are responsible for this.
- Section 3 examines whether the problem is the conduct of regulation?
- Section 4 comments on the AER's proposals.

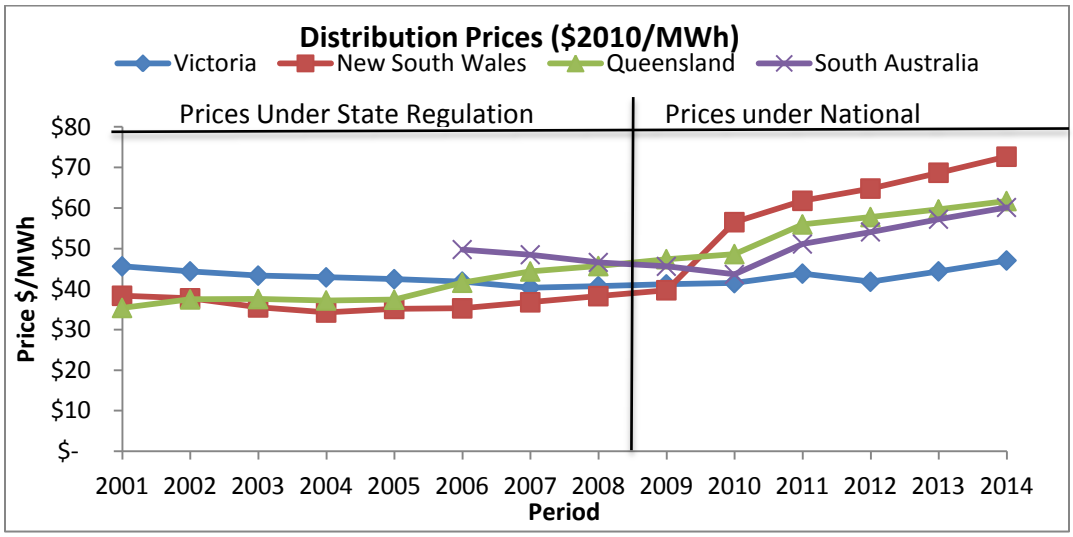
1. Evidence That There is a Problem with Network Regulation

This section considers the question of whether there is a problem with network regulation, what the nature of it is and its impacts.

1.1. Price Outcomes So Far

In 2006 the AER was given the responsibility for the economic regulation of network utilities. The AER undertook its first review of the distribution networks in New South Wales in 2008 and allowed significant increases in revenues which flowed through to significantly higher electricity prices for consumers. The AER has also completed reviews for the distribution network businesses in Queensland, South Australia and Victoria; and is currently reviewing Aurora Energy in Tasmania and will release its draft decision in late November 2011. The outcomes of these other reviews, as well as transmission in New South Wales and Tasmania, have resulted in similar outcomes to those in distribution in New South Wales. The price outcomes from the distribution reviews completed by the AER under the existing Rules/Law are shown in Figure 1 below.

Figure 1: Average Price Increases from AER Distribution Determinations ($2010/MWh) [1]



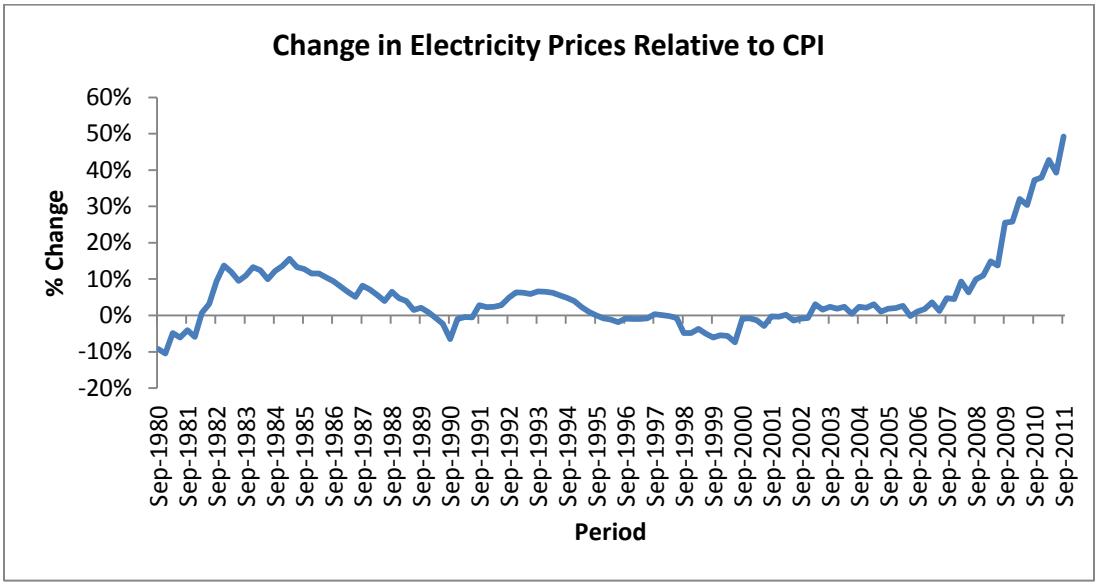
[1] EUAA analysis of data from AER, State regulators and reports from the DNSPs in their regulatory proposals from 2001 to 2009

Figure 1 shows that by the middle of this decade distribution prices (at the end of their current regulatory periods) will be 70 percent higher in New South Wales, 13 percent higher in Victoria, 37% higher in Queensland and 40% higher in South Australia, in real terms.

Also apparent from the chart is that previous reviews completed under jurisdictional regulation, saw far more modest increases in distribution charges. There is a strong correlation here between large increases in distribution prices and the application of the National Electricity Rules/Law by the AER. The outcome is one that is of significant concern to energy users and *prima facie* evidence of problems with the existing regulatory framework and approach.

Moreover, the index of electricity prices in Australia remained within a range of plus or minus 5% relative to the Consumer Price Index (CPI) for the 22 years between 1986 and 2008. Since 2007/08, electricity prices have increased by 40 percent relative to the CPI.[2] This mainly reflects the outcome of AER decisions following reviews of network prices and also appeals on those decisions lodged by the networks involved. This is shown in Figure 2

Figure 2: Changes in Electricity Prices in Eight Capital Figure 2: Cities Relative to Changes in the CPI[3]



[2] Mountain, B, *Australia's Rising Electricity Prices and Declining Productivity: the Contribution of its Electricity Distributors*, a report for the EUAA, May 2011.

[3] Source ABS Consumer Price Index 6401.0

1.2.What Are the Reasons for These Outcomes?

The network businesses have cited peak demand growth, the need to replace ageing assets and historic under-investment in their networks as the prime drivers behind the increased expenditures that they have been asking for in their regulatory proposals. A report commissioned by the EUAA and released in May 2011 refutes these arguments.

2.1.1 Rising demand

Electricity demand has grown more strongly in Victoria than in both Queensland and New South Wales. Yet growth-related expenditure allowed by the regulators has been four times higher per connection for government owned distributors in New South Wales and Queensland than for privately owned distributors in Victoria and South Australia. Figure 3 and Figure 4 show demand growth for the mainland NEM regions.

Figure 3: Cumulative Annual Growth Rates (CAGR) in Demand[4]

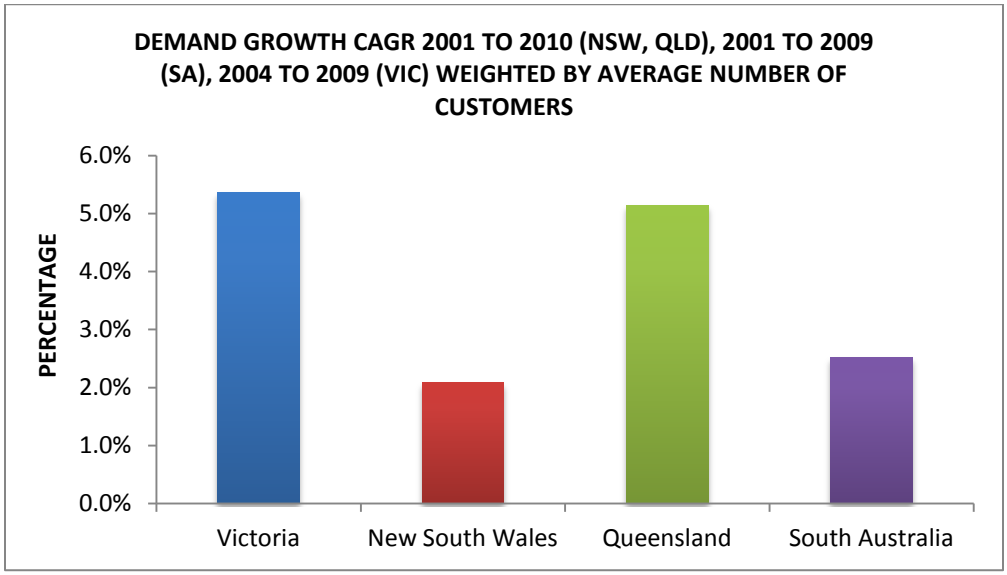


Figure 3 shows that the non-diversified weighted (by customer numbers) peak demand for the distributors has grown by 3.7% per year on average over the last decade, with Victoria

[4] [4] EUAA analysis of data from AER, State regulators and reports from the DNSPs in their regulatory proposals from 2001 to 2009

and Queensland having comparable rates of growth, and New South Wales and South Australia having about half the rate of growth.

Figure 4: Demand Growth (MW per annum average over 10 years)[5]

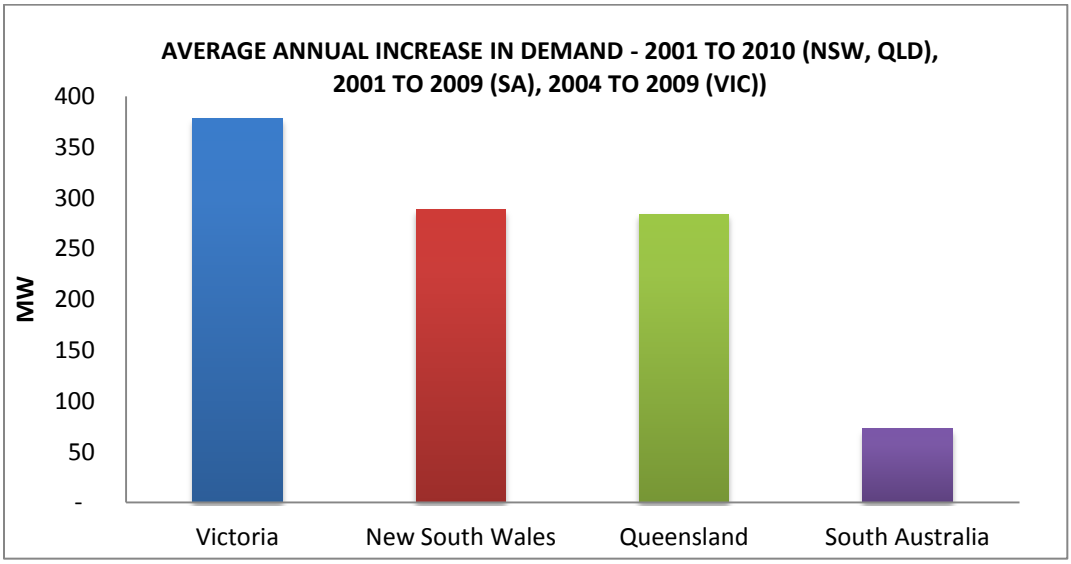


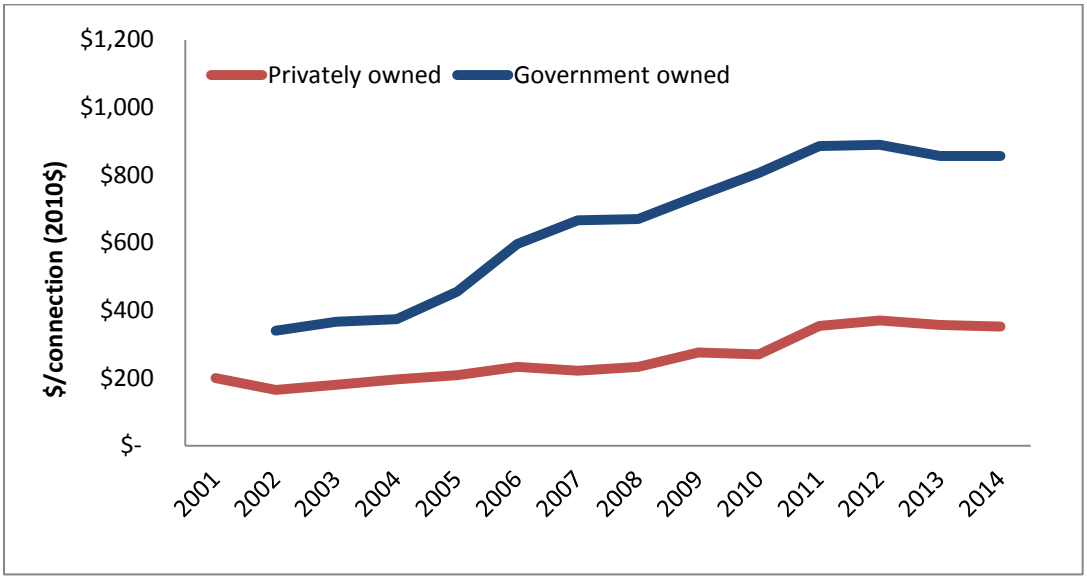
Figure 4 shows that demand growth has been far greater in Victoria, with New South Wales and Queensland comparable, and South Australia behind the others.

Figure 5 compares the capitalised expenditure per customer connection between the government owned networks and the privately owned networks.

Figure 5 shows that the government owned networks spend nearly four times as much as the privately owned networks per customer connection. This suggests there is an inefficient response to demand growth by government owned distributors in terms of their captialised expenditure per connection.

[5] EUAA analysis of data from AER, State regulators and reports from the DNSPs in their regulatory proposals from 2001 to 2009

Figure 5: Capitalised Expenditure per Connection[6]



2.1.2 Ageing Assets

The network businesses have also cited the need to replace ageing assets as a driver behind the expenditure and revenue increases they have applied for. Analysis of the AER's Post Tax Revenue Model (PTRM) found that the privately owned networks in Victoria and South Australia had the shortest remaining asset lives at 24 years and 19 years respectively with the Government owned networks in Queensland and New South Wales having the longer remaining asset lives at 33 years and 24 years respectively. Weighted by their asset bases, the Government distributors have remaining asset lives of 31 years compared to 22 years for the privately owned distribution networks.[7] Based on this it would be expected that the privately owned networks would be inclined to spend more to replace their ageing assets. **Error! Not a valid bookmark self-reference.** shows that the AER has allowed the Victorian distributors around $300 per customer per year to replace assets, yet the distributors in New South Wales are set to receive almost four times as much to replace assets. The differences in incurred expenditure for asset replacement between the government and privately owned distribution networks are stark and out of touch with the remaining asset

[6] EUAA analysis of data from AER, State regulators and reports from the DNSPs in their regulatory proposals from 2001 to 2009.

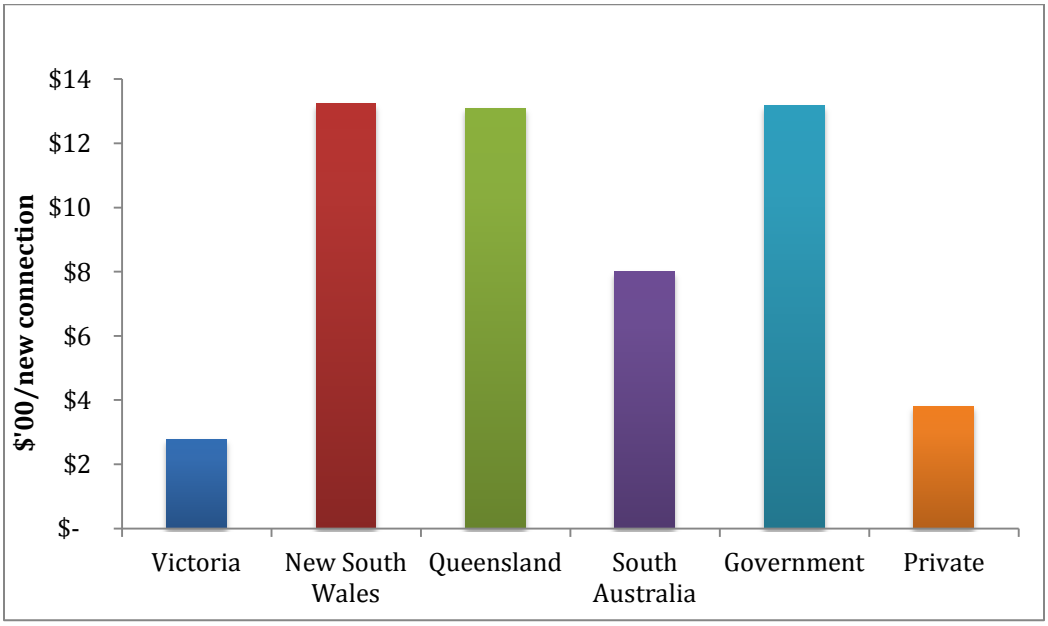
[7] Mountain, B, *Australia's Rising Electricity Prices and Declining Productivity: the Contribution of its Electricity Distributors*, Report commissioned by the EUAA, May 2011

lives of these networks. These charts do not support the justification of higher expenditures on the basis of a need to replace ageing assets.

Figure 6 shows that this is not the case.

Error! Not a valid bookmark self-reference. shows that the AER has allowed the Victorian distributors around $300 per customer per year to replace assets, yet the distributors in New South Wales are set to receive almost four times as much to replace assets. The differences in incurred expenditure for asset replacement between the government and privately owned distribution networks are stark and out of touch with the remaining asset lives of these networks. These charts do not support the justification of higher expenditures on the basis of a need to replace ageing assets.

Figure 6: Asset replacement capitalised expenditure per connection[8]



[8] EUAA analysis of data from AER, State regulators and reports from the DNSPs in their regulatory proposals from 2001 to 2009.

2.1.3 Historic Under-investment

Commissioned studies by the New South Wales Government and the Energy Supply Association of Australia during the mid 1990s found that capital productivity by the distribution businesses was poor at approximately 0.2 percent per annum and the businesses could achieve a 20-30 percent reduction in operating costs through efficiency gains.[9]

A report for the Queensland distribution businesses suggested that Energex had not spent enough money on vegetation management and cross-pole inspections. These expenditures are a small part of a distribution networks budgets and are not persuasive evidence of under-investment. The report also found that Energex needed to adopt higher planning standards but this is not evidence of under-investment.[10] The picture was not clear for Ergon Energy where there was evidence of a problem which could have been under-investment or inherited inefficiencies when six distributors where merged together to form Ergon Energy.[11]

2.2 Recognition of problems with the regulatory framework

After completing reviews of the transmission and distribution networks the AER, through its Chair Mr Andrew Reeves, has acknowledged that there are a number of shortcomings in the regulatory framework. These include:

- The regime incentivises the businesses to submit revenue proposals that are at the top end, or over, what can be considered a reasonable reflection of required expenditure.
- The rules require all actual capex to be rolled into the asset base at the start of the next regulatory period without review of its efficiency, even when the business has overspent its allowed expenditures. This results in step-change price increases at the start of the next regulatory period.
- The AER is restricted in the application of the cost of capital due to the rules, which require the AER to assess the cost of debt against corporate bonds issued in Australia, which are not reflective of the actual debt raising activities of the DSNPs.

[9] Pierce, J., Price, D., Rose, D "The Performance of the NSW Electricity Supply Industry", Reserve Bank of Australia, 1995.

[10] Independent Panel, 2004 p.11

[11] Ibid p.8

- There have been further increases in revenues granted to the networks from appeals to the Australian Competition Tribunal (ACT). The cost of appeal is weighed against the results from a successful outcome and incentivises appealing an AER determination. The cost of an appeal can be recovered from the network's customers.

Mr Reeves argued for the need for wide ranging reform of network regulation to deal with the widespread and large electricity price increases being felt by electricity users in the National Electricity Market (NEM). He also supported the need for rule changes.

> *"The AER considers that changes to these rules are necessary for regulatory outcomes to better meet the objective of the law [that is, what is in the long term interests of consumers of electricity]."*[12]

Others have also recognised the failings in the current regulatory framework. Professor Ross Garnaut found that there are flaws in the current framework in his *2011 Update Review*:

- The rate of return in the NER allow for a rate of return on equity component of the Weighted Average of the Cost of Capital (WACC) does not reflect the low risk profile of the investments made by natural monopoly network assets and furthermore the Government owned networks have a regulated rate of return that exceeds the true underlying cost of finance.[13]
- The networks have an incentive of overstate the size of their asset base with their capex and opex as they capture the cost savings achieved in the regulatory period.[14]
- The networks also have an incentive to over invest in their networks when the cost of capital set by the AER is too high.[15]

EUAA data comparese the capex profiles for the Government owned networks in New South Wales and the privately owned networks in Victoria.
Figure 7 and

Figure 8 show that the distribution businesses in New South Wales have typically overspent their regulatory capex allowances from the AER whereas the privately owned distribution networks in Victoria have tended to underspend on their capex allowance,

[12] Reeves, Andrew, Chairman, AER, *'Finding the balance—the rules, prices and network investment',* Energy Users Association of Australia, *Energy Price and Market Update* seminar, Melbourne, 20 June 2011.
[13] Garnaut, R., *Garnaut Climate Change Review Update 2011: Transforming the electricity sector,* p.42, May 2011.
[14] Ibid. p. 41
[15] Ibid. p.41

except towards the end of the 2005 to 2010 regulatory period where there is a smaller overspend compared to the NSW Government owned networks.

Figure 7: NSW DNSP Average Capex Comparison[16]

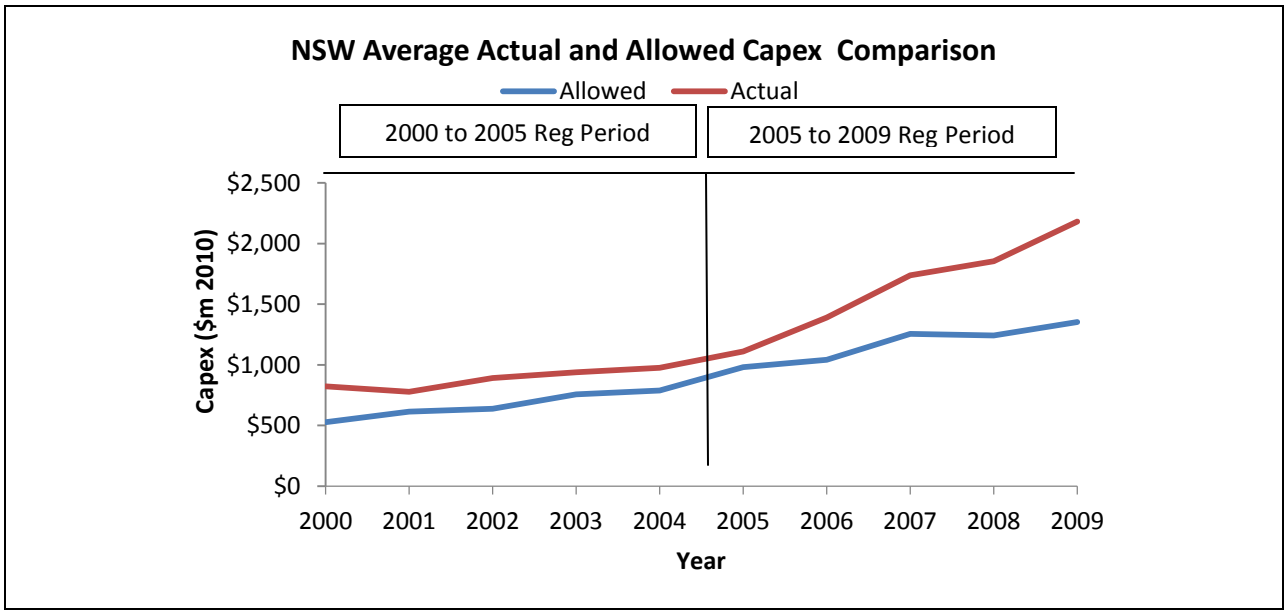
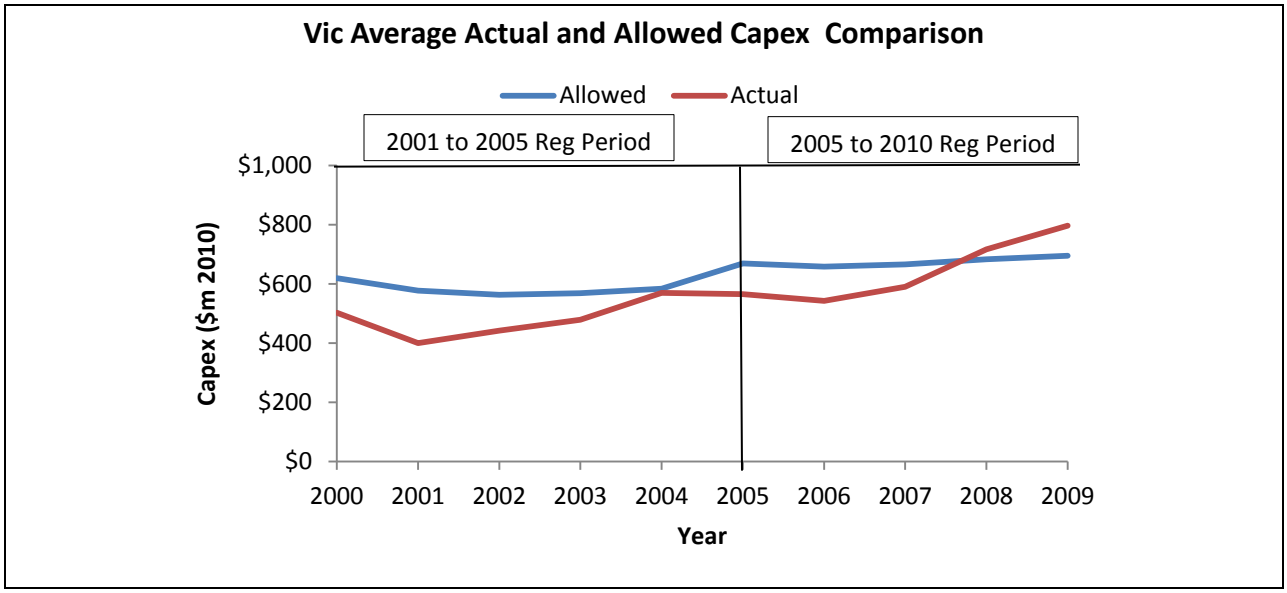


Figure 8: Victorian Figure 8:DNSP Average Capex Comparison[17]



[16] EUAA analysis of data taken from AER and IPART capex allowances and actual data reported by the NSW DNSPs in their regulatory proposals from 2000 to 2009.

[17] EUAA analysis of data taken from the Australian Energy Regulator and the Essential Service Commission actual and allowed capex from 2000 to 2009.

The New South Wales Independent Pricing and Regulatory Tribunal (IPART) has also recognised the flaws in the current regulatory regime. IPART has stated its concerns that the NER *"skews the AER's decisions towards higher prices and potentially inefficient outcomes."*[18] It also found that the framework:

- May constrain the AER's ability to apply what it considers to be the best estimate of the efficient operating and capital costs.
- May provide strong incentives for network business to invest capital in the network because the prescriptive requirements of the NER may lead to excessive returns.
- Allows the businesses to earn a return on all capital invested regardless of its efficiency and prudency, by requiring the AER to roll all capital expenditure into the asset base without any *ex post* review.
- Provides opportunities for the businesses to target particular issues through the appeal process.[19]

IPART recommended that the AEMC review the NER to ensure that the rules better enable the AER to promote efficient and prudent costs.[20] IPART also found that the rules place an usually high burden of proof on the regulator.[21]

2.3 Outcomes for Transmission Networks

The EUAA has not yet undertaken a comprehensive analysis of the performance of the transmission networks in the NEM, as we have with the distribution networks, as our focus was initially on distribution this being the largest component of the network charges paid by our members. However, some analysis of this in provided below.

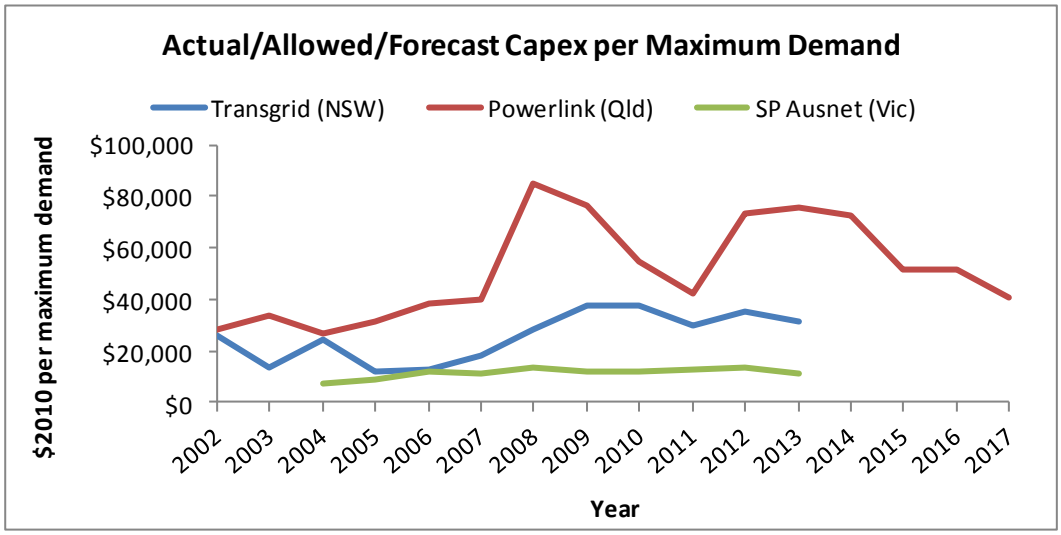
Figure 9 compares the capex per maximum demand served for the three transmission networks in New South Wales, Queensland and Victoria.

Figure 9 shows that the government owned networks spend more capex to meet maximum demand on their networks compared to the privately owned SP Ausnet in Victoria.[22] This

[18] IPART, *Changes in regulated electricity retail prices from July 1 2011,* June 2011. p.93
[19] Ibid p.95
[20] Ibid p.95.
[21] Ibid p. 96.
[22] The figure is not entirely accurate as it takes into account total capex rather than specific capex devoted to meeting maximum demand. The use of total capex reflects inconsistencies in the way the businesses report on their capital expenditure and where they classify the expenditure. For example SP Ausnet reports on specific expenditure to meet maximum demand and Transgrid has reported capex related to maximum demand under network augmentation. As mentioned the EUAA has not done a comprehensive study of the performance of the transmission networks however we will be doing more work on the TNSPs next year.

chart suggests that the trend of government owned networks spending more capex than the privately owned networks is repeated for transmission networks. Despite the declining expenditures for Powerlink based on their current regulatory proposal we suggest that the expenditure is still likely to be higher than a privately owned network such as SP Ausnet in Victoria.

Figure 9: TNSP Capex per maximum demand[23]



One of the criticisms of the regulatory framework is that the rules encourage overspending especially in the final years of a regulatory period. Figure 10 and Figure 11 show the capex for Transgrid in New South Wales and Powerlink in Queensland.

Figure 10 and Figure 11 show that Transgrid overspent their capex allowance by just under $200 million (real 2010) in the final year of the 2005 to 2009 regulatory period and Powerlink overspent their capex allowance at the end of the 2002 to 2007 regulatory period by $200 million (real 2010) and by approximately $300 million (real 2010).

[23] EUAA analysis of data taken from capex allowances determined by the AER and the ACCC; and historical capex data from the TNSPs revenue proposals. Maximum demand data is taken from the 2011 Annual Planning Reports from the businesses.

Figure 10: Transgrid capex profile[24]

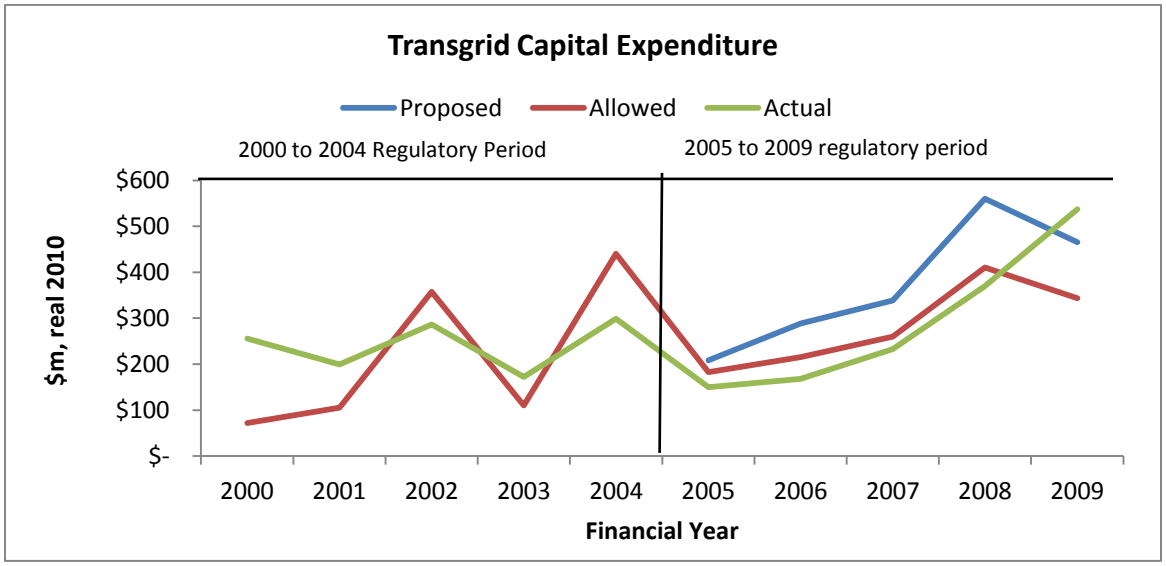
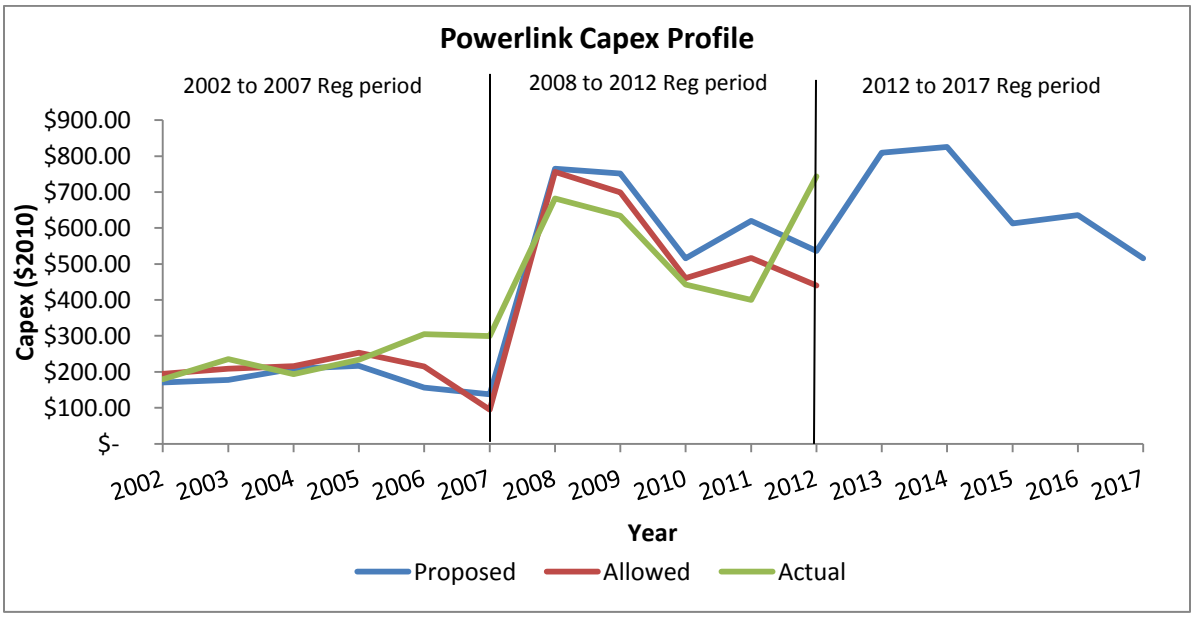


Figure 11: Powerlink capex profile[25]



[24] EUAA analysis of the capex allowances determined by the AER and ACCC since 2000; and the historical capex reported by Transgrid in its Revenue Proposals.

[25] EUAA analysis the capex allowances determined by the AER and ACCC since 2000; and the historical capex reported by Powerlink in is Revenue Proposals.

Although this is a limited analysis, the charts suggest that some of the problems in the regulatory framework that have impacted on the performance of the distribution networks may be having an influence over the performance of the transmission networks in relation to government owned networks incurring higher expenditures to meet the needs of their networks compared to privately owned transmission networks and the rules encourage transmission networks both government owned and privately owned to overspend their capex in the final year of a regulatory period.

2.4 Gas Networks

The EUAA has not performed an analysis of the performance and outcomes of the gas regulatory resets and we recognise that gas networks are regulated under the National Gas Rules (NGR) with some differences existing between the NGR and the NER. Nevertheless, there are similarities in the way that the AER applies regulation between electricity and gas and they have clearly attempted to keep as much consistency as possible between them. Given this, it may be inferred *prima facie* that there are also serious deficiencies in the way the gas networks are regulated. We would strongly encourage the AEMC to examine this.

2. Are the Rules the Problem?

The two bodies representing transmission and distribution networks respectively, Grid Australia and the Energy Networks Association, have both claimed that the problem to be addressed is the conduct of regulation, rather than regulatory design embodied in the Rules. They claim that the Rules are working as intended and that the AER already has enough discretion but may not be applying it properly, does not understand their businesses and is prone to error (which is why they say they have so frequently sought merits review of the AER's decisions by the Australian Competition Tribunal).

The EUAA considers the claims by Grid Australia and the Energy Networks Association are inaccurate and do not truly represent the facts. We are particularly disappointed that the NSPs have failed to show evidence of why the factors that they assert have driven higher expenditure (demand growth, ageing assets, historic underspending)are, in fact, the real drivers and have also failed to respond substantively to the evidence that these factors, in fact, provide poor explanations of the increases in expenditure.

As discussed in the previous section, some NSPs are clearly able to deliver their services very much more efficiently than others.

The AEMC's Chairman said clearly at the Public Forum for this review (and we strongly support him) that the AEMC is looking for fact and analysis to back up stakeholder's claims and will place more weight on this than mere assertion. An onus should therefore be placed on the NSPs, especially the poorer performers (typically the government-owned NSPs) to substantiate their claims and refute the contrary evidence before their claims that the regulator has failed to understand their businesses should be given any weight. So far, the network businesses have relied upon a combination of assertion (eg internal or personal views about the absence of any inefficient spending on their part), threats not backed by evidence (eg the prospect of blackouts) and unproven correlation (eg reference to an Auckland-type blackout) to support their case. This is hardly convincing and does not pay due respect to energy consumers who fund the networks' activities. Secondly, in our view it is far more likely that the many appeals against the AER's decisions reflect flaws in the regulatory regime, more specifically the rules and the merit review process, rather than institutional problems. This is also a conclusion reached by Garnaut, IPART, the Duffy-Parry review and the AER.

In regard to the issue of the relative contribution of regulatory design and the conduct of regulation to the observed outcomes, our view is it is difficult to establish the relative importance of the design of regulation and the conduct of regulation in explaining the observed outcomes.

One view is that the AER may be less constrained by the existing Rules than it suggests it is. In our view, there is some truth in this, though it is only part of the story. We also acknowledge the justification in the alternative view that the AER is bound by a prescriptive set of Rules and exercises a narrow reading of the Rules in order to avoid lengthy appeals against its decisions, not least in view of the scarce resources that such appeals can consume. This almost certainly works in favour of the regulated businesses and against the interests of consumers given that the Rules have flaws that bias outcomes in favour of the networks and the appeals mechanism is similarly oriented (eg it is acknowledged to allow the businesses to 'cherry pick' AER determinations for issues on which to appeal with relatively little downside risk and the businesses are the only parties likely to appeal given the asymmetry in the appeals mechanisms.)

The AER also applies this approach to the regulated gas networks notwithstanding that the National Gas Law is far less prescriptive on this matter. It has argued a need to do so based on consistency between energy sources. However, is consistency logical even if the approach leads to excessive returns to the networks (as the AER now argues is the case in relation to the setting of debt under the NER), what weight should be placed on it, how important is it and what price should consumers pay for it? To our knowledge the AER has not fully answered these questions.

Ultimately the degree to which the AER is constrained by the Rules is not critical to assessing the AER's proposals. The AER has said unequivocally that it feels excessively constrained by the Rules. It made this view known during the consultation on the Chapter 6A Rules in 2006, and now five years later it is making the same views known again based on its experience with the Rules. One view of this (obviously held by the regulated networks) is that the AER is shielding its own flaws by blaming the Rules, but we find it very difficult to believe that this is the entire reason for the serious problems that have arisen in network regulation. The AER has several years of experience in administering these Rules covering multiple regulatory resets. Whilst its views should not just be accepted at face value, they should be given significant weight and be rebutted only with the force of significant evidence to the contrary. This is not something that the networks have, to date, provided.

2.1.Comment on the AER's proposals

The AER has proposed some specific changes to the Rules to strengthen its ability to assess NSP expenditure proposals. The EUAA strongly supports the need for the regulator to have

sufficient powers and scope to assess regulatory proposals from businesses that enjoy a monopoly status in our community. It is well known that monopoly confers an ability to raise prices and/or deliver poorer service such that consumers are left worse off. Given this position of privilege, it is only right that monopolies should be subject to constraints that limit their ability to do this. It is also well known that network monopolies will, given the opportunity, seek to optimize the outcomes they get from any regulatory process. Any regulatory framework and its administration need to be wary of this. Regulatory design and application are therefore critical issues. We draw these points to the attention of the AEMC as they are important in its review of the network regulation Rule change proposals.

2.1.1. Discretion versus prescription

The AER's proposal suggests that prescription has hindered its ability to "appropriately" regulate NSPs. The AER suggests that this has resulted in regulated prices higher than the level associated with efficient investment and operation by NSPs.

However, while the EUAA supports changes to the Rules in these areas, in a more general sense, we suggest that prescription is not necessarily in NSPs interests, and neither is discretion necessarily in consumers' interests. For example, giving more discretion to a regulator that was inclined towards NSPs (for whatever reason) might be expected to result in decisions more favourable to NSPs, than would be the case if there were prescriptive rules that restricted the regulator's ability to do this. As such, we suggest that describing the problem as a dichotomy between prescription and discretion is not useful. The problem is better described as poorly-specified prescription or poorly directed discretion.

The matter of the right balance between discretion versus prescription in regulation is an old one and is relevant to all regulators in all regulated sectors the world over.

There is no simple answer to the issue of giving more discretion to the AER or not. Getting the balance right is not easy in practice and involves trade-offs. For example:

- Prescription may provide greater certainty as to what the regulator is required to do but this could be at the expense of giving the regulatory regime and the regulator enough room to move to allow decisions to reflect changes in the economy, in energy markets, in the environment in which decisions are made or in technology. In the end, some trade-offs and judgements are needed to balance such factors.

- Too much discretion, on the other hand, may risk injecting too much uncertainty, inconsistency, instability and unpredictability into regulatory decisions, which could harm regulated entities and consumers alike.

- The choice between prescription and discretion also needs to consider the matter being regulated and how well suited it is to one or the other, eg the maturity of the matters being regulated or the industry under regulation.

- To some extent the choice is also somewhat arbitrary as the application of prescription is sometimes merely a semantic one of codifying a matter in rules or regulations on the one hand versus guidelines or such issued by the regulator on the other. Ultimately this can turn on issues such as the competence of the body making the 'rules', its objectives, its experience, its independence and the transparency with which it operates.

The question as to whether the AER should be given more discretion cannot therefore be answered in the abstract or *a priori*. The question can only be meaningfully answered in the round or on a case-by-case basis. The correct answer must take into account the context or environment under which more discretion is given. More importantly, the giving of discretion must have a high probability of leading to a better outcome or equivalently a reduction in the magnitude of the problem it is intended to solve.

The EUAA is of the view that the Rules have, to some extent, restricted the ability of the AER to determine efficient expenditures objectively. By way of an example, there are two specific clauses in the Rules that discriminate against the AER exercising its judgments. In particular:

- *Presumption in favour of the NSPs*: Chapter 6 (6.12.3(f)(1) and 6A (6A.13.2(a)(2) limits the AER's discretion to vary NSPs' expenditure proposals by requiring the AER to adjust NSPs' claims "on the basis of" the NSPs' proposals.

- *Onus of proof*: (clause 6.12.2(ii)) sets specific requirements that the AER needs to satisfy in demonstrating to DNSPs that their proposals are wrong.

The Rules have constrained the ability of the AER to use other sources of information and other methods of analysis to determine efficient cost. There is no compelling argument for restricting the AER in this way. Having access to a wider set of information is likely to enhance deliberation and decision making. The EUAA contends that the AER (which is accountable for its decision) should be empowered to deliberate and form judgments independently without needing to present its calculations as variances against the NSP's

proposals. It's ability to do so would, we believe, lead to an improvement in network regulation and the outcomes it delivers (including against the NEO).

The presumption in favour of the NSPs is inappropriate and unfair to users. The EUAA is of the view that, as far as possible, the regulatory framework should not favour one side of the market. There is no compelling legal or economic rationale for this. Moreover, it limits the AER's discretion in a way that favours the NSPs. The EUAA considers this a failure of regulatory design to the detriment of users. It is not only inefficient but highly unfair.

In relation to the onus of proof, the EUAA considers it important that the onus of proof be reversed and be on the NSPs. That is, the NSPs should be required to convince the regulator that its expenditures are efficient. A key reason is that this is a more efficient way of solving the fundamental problem of asymmetric information that plagues the whole regulatory process. Moreover, this is also consistent with the objectives of incentive regulation, which are to provide the networks with incentives to reveal their true costs. Currently, the regulator is often compelled to do a line by line assessment of various types of expenditures to ascertain whether they are efficient or not. This is daunting given the limited knowledge and information available to the regulator. On the other hand, since the NSPs have access to a lot more information (they manage and operate the business), getting the NSPs to justify the efficiency and merits of their various expenditures is more likely to deliver superior regulatory outcomes. This is more appropriate than the regulator having to prove that these expenditures are inefficient. Placing the onus on the regulated businesses is also more consistent with approaches adopted in other regulated industries, in other countries and in other areas of regulation.

Onus of proof: An example

Consider the case under the current Rule (onus of proof with the regulator) where the AER may allow an expenditure item that is not efficient. In this case the customer has to pay for something that they should not have to. A misallocation has occurred.

Consider another scenario where there is a change in the onus of proof, and similarly the AER does not allow an expenditure item that is efficient. In this case, the customer misses out on the availability of this service (they would want to have it) but does not pay for it.

We submit that the inefficiency is larger and the consumer is worse off in the first scenario, i.e. where the onus of proof resides with the regulator.

Assuming that security of supply will be unaffected by this change in the onus of proof, and given different type of risks, as set out above, a choice is inevitable. The EUAA strongly supports the onus of proof being on the NSPs to prove that their proposed expenditures are efficient. This is in accord with what typically happens in the market place where it is the producer who has to convince the buyer about the merits of their products or services.

2.1.2. The AER's proposals for the determination of opex and capex allowances

The AER has suggested that the current Rules encourage NSPs to propose higher levels of expenditure than is efficient.

Under the proposal, the AER would be given the discretion to determine the forecast of required expenditure. The AER argues that this would allow it to weigh up all available information, evidence and data, including benchmarking analysis, in order to reach a balanced decision on forecast expenditure. In other words, the AER would not be 'bound' by the NSP's proposal.

The EUAA is concerned that under the price or revenue cap regulatory framework, there is an intrinsic incentive for NSPs to over-inflate expenditure. This intrinsic incentive is general to this type of regulation and does not depend on the types of rule. This suggests that changing the rules offer only partial solutions. However, it is also worth commenting that it is a well known problem and any informed and independent regulator would be aware of it and aware of the need to guard against such behavior.

Hence, the EUAA considers that the AER's proposals are sensible and should provide for a more balanced approach. For example, by removing the requirement to determine opex/capex allowances "based on" a distributor's proposal and removing the restriction on the AER to make changes based on distributors' proposals, the current Rule intentionally restricts the AER's discretion and this works to the advantage of NSPs.

2.1.3. The AER's proposals on incentive design

The EUAA submits that there is a perverse incentive to overspend capex in the last year of the regulatory period particularly for government owned NSPs. Section 2 above provided

evidence to this. The EUAA therefore considers it necessary to strengthen the discipline on NSPs to properly manage their capital expenditure.

The AER has proposed several changes to deal with this. One is that only capex up to the forecast would be automatically added to the regulatory asset base (RAB). Forty per cent of capex in excess of the allowance would be funded by shareholders and the remaining 60 per cent would be rolled into the RAB in the next regulatory period.

Why do NSPs typically overspend in the last year of the regulatory period? Because the NSP only has to finance this overspend for one year but this cost is outweighed by the overspend in the last year being rolled into the RAB in the next regulatory period. It will then earn a return on and of capital for the duration of the regulatory period.

The EUAA also submits that the overspend in the last year is not independent of the cost of funds. For example, any disparity between the actual cost of debt and allowed cost of debt will strengthen over-borrowing and overspending. It seems plausible that the combination of accessing cheaper cost of debt relative to 'allowed' cost of debt for government owned NSPs together with the benefit of being rolled in to the RAB mostly explained the motivation for the overspend of government owned NSPs.

The question is whether this 60/40% rule is the most effective, non-distortionary and fairest way of minimizing the tendency of NSPs to overspend capex.

It is noted that any split would be arbitrary. We suggest that the focus should not be on finding the optimal split as such but deciding whether the specific proposal sufficiently mitigates the incentive to overspend capex.

Even if some overspends were efficient, the EUAA is of the view that it is highly unlikely that all of the overspend would be efficient. Thus the 60/40 per cent rule tries to strike a balance. It must also be noted that currently there are no mechanism to assess the efficiency of the overspend in the last year of the regulatory period before it is being rolled in to the RAB. The EUAA considers it inefficient and unfair (to users) to allow all overspend to be rolled in to the RAB (and subsequently earned a return on and of capital) if these are inefficient expenditure in the first place.

The EUAA is aware of penalties imposed on overspend in other overseas jurisdiction – see OFWAT and OFGEM in the UK. We urge the AEMC to investigate these schemes further.

At this point EUAA offers qualified support for the 60 per cent Rule proposal in the absence of a superior alternative but urges the AEMC to apply a cost/benefit analysis to the proposed rule as well as to consider other options.

2.1.4. Cost pass-through & contingent projects

While the AER has strengthened the penalties faced by NSPs for overspending regulatory allowances, it has included provisions for re-openers and contingent projects to be applied to DNSPs (they already apply to TNSPs) in addition to the existing pass-through arrangements.

The EUAA is concerned that these additional provisions may weaken expenditure discipline, as well as create opportunities for cost shifting and rent-seeking. Furthermore, the AER's proposals may also undermine the objective of price cap regulation by providing many other ways in which NSPs may recover expenditure from consumers, other than through the main price control.

We urge the AEMC to err on the side of ensuring that networks, as far as possible, face the same disciplines and incentives as firms operating on competitive industries and not provide a consistent set of incentives. The AEMC will need to weigh up the relevant costs and benefits of this proposal as well as the merits of other alternatives.

2.1.5. The AER's proposals on the cost of capital

The AER has proposed that it should be allowed to determine the return on debt and the calculation of the risk free rate as part of its periodic WACC reviews. Further, the 'persuasive evidence' provision will longer apply.

The EUAA does not support this Rule change proposal by the AER, although the EUAA agrees with the AER that the existing return on debt methodology is flawed. However, it does not follow that the best solution to flawed clauses in the Rules is for the AER to review them in future WACC reviews. An alternative option is to fix the flawed clauses, such as the Rule Change Committee has described in their proposal.

Previous research by the EUAA has shown that the benchmark used to calculate the debt risk margin does not reflect the conditions in the money market[26]. The EUAA is also of the view that, generally, the actual cost of debt should be given more weight in the estimation of the cost of debt.

[26] Mountain B, *The Debt Risk Premium*, A Report for the EUAA (2010) (confidential paper)

The proposal by the AER to eliminate the 'persuasive evidence' clause from Ch 6 of the Rule is supported by the EUAA. The reason is that the "persuasive evidence" clause has been used by NSPs to appeal AER decisions on the WACC parameters. The results of these appeals have been to the detriment of consumers. This particular provision is unbalanced because it incentivizes the NSPs to appeal AER decisions without the risk of a negative outcome. For example, If NSPs appeal, they have an equal chance of winning. Thus NSPs either receive a better outcome from the ACT. At worse,, they get what they were given by the AER. They cannot be worse off. This is especially so since expenditures on these appeals are included as 'efficient' expenditure in their regulatory proposal. The EUAA fully supports the elimination of this provision.

2.1.6. The AER's proposals on procedural amendments and confidential information

The AER has proposed that NSPs be restricted from making submissions on their own revenue/price control proposals.

NSPs can respond to the draft decision through their revised proposal (and not through submissions or through a combination of their revised proposal and submissions). The proposed rules would also require the AER to not consider new information in an NSP's revised proposal which goes beyond responding to the draft decision.

The EUAA fully supports the AER's proposals to restrict NSPs from making submissions on their own revenue proposals.

The AER provided clear evidence of strategic behaviour by NSPs in their provision of information to the AER.

The objective of the current rules, as envisaged by the AEMC was to encourage NSPs to provide complete proposals which reflect their best available information upfront to allow for effective consultation and for the AER to make timely decisions. However, this objective has been undermined by NSPs subsequent to the lodging of their revenue or regulatory proposals (in particular, after their revised proposals), making substantial submissions that contain information which otherwise should have properly formed part of their proposals.

It is clear that such strategic behaviour contravenes the standards expected of a transparent and accountable regulatory process, and the AER's proposals to deal with this seem to be a reasonable and measured response.

Similarly, the EUAA supports the AER placing less weight on confidential information provided to it by NSPs (as it does with respect to confidential information provided by other stakeholders). More generally, any monopoly business should by definition have strict and limited reasons for being granted confidential status to its information.

3. Rule Change Committee's proposal

The proposal by the EURCC relates specifically to the rules for the calculation of the return on debt which forms part of the WACC and establishes the return on assets.

The EUAA's own research also confirmed the Committee's finding that there is a problem with the Rules[27]. More specifically, the Rules relied on a benchmark (10 yr BBB+) bond that is unreliable and subject to a large degree of uncertainty. Further, the Rules do not placed enough emphasis on the actual cost of debt that NSPs are sourcing funds at.

Mostly as a result of this flaw in the Rules, the AER has in turn set the return on debt significantly greater than the cost of debt raised by NSPs. Our own estimation suggested a difference of between 100 and 200 basis points. This is consistent with the 190 basis points estimated by the Committee with data from the ABS and ASX.

Further, the EUAA supports the proposal that more weight should be placed on the actual cost of debt of regulated monopolies.

Moreover the Competition Principles do not seem to apply in these cases. The reason is that there is no risk of "crowding out" a competitor in relation to this matter. The NSPs' captive customers cannot seek out a competitor supplier.

The EUAA also notes with concern the adverse implications that result from the flaws in the Rule shown by the Committee. The Committee estimated that the higher cost of debt would result in electricity prices for end user being 8% higher on average in 2014.

In past submissions to AER regulatory resets, the EUAA has argued that the benchmark for debt currently used is unworkable and this has resulted in a higher cost of debt (i.e. windfall gain to NSPs) and higher prices for consumers.

From the reasoning above, the EUAA also agrees with the Committee's proposal that the return on debt for government owned NSPs should reflect the cost of debt in State government bonds, rather than the cost of debt of privately owned corporations.

[27] Mountain, B *Australia's Rising Electricity Prices and Declining Productivity: the contribution of its Electricity Distributors. A Report for the EUAA (* 2011).

4. Other problems with existing energy network regulation

The EUAA is of the view that a more comprehensive reform of the regulatory framework is required. These reforms are well beyond what the AER has proposed.

4.1. Benchmarking

The EUAA fully supports the benchmarking of future capex and opex that the AER must have regard to as set out in the existing NER and has long argued for the AER to do more benchmarking of this kind. We are concerned that, notwithstanding this, the AER has failed to undertake such benchmarking. This has worked to the detriment of energy consumers who rely on benchmarking to give them confidence that energy networks' expenditure is truly efficient and that they are paying prices for the network services they consume that reflect this. We contrast this to Ofgem in the United Kingdom, which has utilized economic benchmarking as a key part of its regulatory process for many years with useful impact in keeping network prices close to what users might expect from a competitive market.

We also note that the AER does not utilize such benchmarking in its gas network reviews and there is nothing to stop them from doing so under the gas rules (though the requirement is not explicit).

In submissions and interactions with the AER, the EUAA has queried why the AER was not doing benchmarking, and the AER responded that they did not have access to good quality data and without this benchmarking will be uninformative. They have also indicated a desire to increase their use of benchmarking but have not given a timetable for this. This is not persuasive. They are required to benchmark under the Rules and we note the considerable information gathering powers available to the AER (eg through the Regulatory Information Notice process). Further, benchmarking is an accepted and proven technique in regulatory economics and practice (eg, as mentioned above, Ofgem has done it for 20 years and started without a perfect data set). Some networks have publicly supported greater use of benchmarking and several have also told us privately that they have the data needed for the AER to benchmark but have not been asked to provide it. Arguably, a clearer requirement on the AER to undertake regulatory benchmarking should be enshrined in the Rules.

The AER has not sought any changes to the Rules in relation to benchmarking in its Rule Change proposal. However, they have said clearly that they feel that the existing Rules constrain them from doing so and that, should their changes be accepted, they would undertake more benchmarking (as well as other relevant techniques). Whilst we welcome

this statement from the AER, we are unclear from the AER's proposal as to how the existing rules constraint them in this way and why the changes they seek would alter this situation? We would welcome further comment from the AER on this matter so that we may better understand the issues they are raising and also better respond to them.

Given the importance of benchmarking to an effective regulatory process, its lack of use at present and the AER's comments on their likely greater use of it if their Rule Change proposals area accepted, we would urge the AEMC to look closely at these matters in this review.

4.2.Merits review appeals

The EUAA believes that the existing merits review appeal mechanism has flaws which need to be corrected. We would therefore strongly advocate the need for a change to the merits review process. We also understand that merits review is set out in the National Electricity/Gas Law and would require a change to the relevant Acts to achieve this. Hence, it is not a Rule Change process that is at issue in relation to merits review and the matter is therefore out of the AEMC's jurisdiction. Nevertheless, we feel that it is worth raising in the context of this review because the appeals process and the rules for energy network regulation are linked (eg, the existing Rules themselves encourage appeals and the fact that a merits review appeals system exists encourages challenges based on the Rules) therein the network regulatory Rule Change proposals under review by the AEMC are also linked to the issue of merits review.

The aim of any change to merits review should be to minimize (or eliminate) NSPs being able to "cherry pick" various items of a regulatory decision by the AER. The ability of the NSPs to successfully exploit this aspect of the law is not only inefficient but highly unfair. It is a matter of concern to the EUAA that every decision made by the AER to date under the existing Rules has been the subject of appeals by the networks. Appeal has therefore become the norm rather than the exception. Whilst the networks would argue that this is due to regulatory error, we set out in section 2 above why we believe it is due to problems with the existing Rules.

By contrast, the situation in the UK is very different and appeals are rare. One reason for this is "cherry-picking" is discouraged by the risk that an appeal could reopen an entire decision and risk an outcome with less revenue.

We also note that the SCER has spoken of the possibility that the review of merits review under the NEL that is to take place by 2015 could be brought forward. We would strongly support such a review and urge the AEMC to bring to the attention of the SCER the fact that the problems identified with the existing Rules have links to the merits review mechanism and that the two issues should be considered more-or-less simultaneously.

4.3.Ownership issue

The Rules assume that private and state-owned NSPs face the same incentives and constraints. Research by the EUAA strongly shows that this is clearly not the case[28]. State-owned NSPs have been able to accelerate their expenditures and hence caused much higher price rises than their private counterparts. They have also been provided with rates of return under the existing Rules that are far higher than their State ownership justifies. Moreover, the existing Rules and approach seem to be responsible for delivering a 'lowest common denominator' approach to national network regulation with relatively well regulated privately-owned networks being dragged into a 'race to the bottom' by a common approach regardless of ownership, with energy consumers the worse off.

Whilst we appreciate that this review and the AEMC cannot make decisions about the ownership of networks, we believe that the matter is still an important one for the AEMC to have regard to in this review. To this end, the AEMC should ensure that any Rule Changes stemming from this review recognize that there can be fundamental differences in the way regulatory decisions ought to be made for private versus government owned networks, and that failure to recognize this is penalizing electricity consumers, especially those in States where government ownership of networks exists. Unless this issue is addressed directly, consumers in those states will continue to pay higher electricity prices than they should.

[28] Mountain, B. *Australia's Rising Electricity Prices and Declining Productivity: the contribution of its Electricity Distributors. A Report of the EUAA (*May 2011).