16 April 2012

Mr Richard Khoe
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Mr Khoe,

Submission on AEMC Directions Paper (ERC 0134)

The Energy Users Association of Australia is pleased to have the opportunity to make a submission to the AEMC's Directions Paper on the changes to Chapter 6 and 6A proposed by the Australian Energy Regulator and the Energy Users Rule Change Committee.

Yours sincerely,

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SUBMISSION ON THE AEMC DIRECTIONS PAPER ON NETWORK REGULATION RULE CHANGE PROPOSALS

16th April 2012

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Executive Summary

The EUAA is the national association of energy users – electricity and gas. The combined energy use of EUAA members accounts for a significant proportion of energy consumed in Australia and our members make a substantial contribution to the national economy in terms of production, investment, employment and regional activities. We have around 100 members including major energy users, across many industries and all States. We welcome the opportunity to provide a submission to the AEMC's review, in view of the importance of network regulation to energy users.

As the AEMC would be aware, the EUAA recently published commissioned research that showed that average electricity prices to household electricity users in Australia are higher (at average 2011 exchange rates) than average prices in the EU, Japan, the United States and Canada. Even adjusted for Purchasing Power Parity, Australian household electricity prices are substantially above those in Canada and the U.S., but only slightly below those in Japan and EU.

Moreover, this research showed that, in an international comparison of electricity prices across 91 different jurisdictions, residential electricity prices in four states (accounting for three-quarters of Australia's population) are in the Top Six in this comparison. The research also showed that electricity price increases in Australia rather than exchange rate changes, were the main cause of this deterioration. A report produced by KPMG released shortly after our paper found that electricity prices for Australian business consumers were also the highest among the 14 countries included.

This comparison reflects current prices, before further price changes which the AEMC suggests will increase by 37% over the next two years. We note that the jurisdictional regulators in Queensland and New South Wales have recently announced average price increases of above 20% and above 16% respectively from 1 July. Around half of this increase has been attributed to increases in network charges. Using these prices, from 1 July 2012 average household electricity prices in New South Wales will be higher than all 90 other countries, states and provinces in the comparison whether current exchange rates or PPP-adjusted rates are used. This represents an astonishing deterioration in Australia's relative standing. Energy affordability and competitiveness has been a source of national strength for Australia for a long time but has now turned into a weakness that must be addressed.

Electricity price indices produced by the Australian Bureau of Statistics shows that the rate of household electricity price increases since 2007 have been unprecedented since the ABS started collecting electricity price index data in 1980. Such electricity price outcomes are astounding in Australia, considering its endowment of natural resources much of which is not exposed to higher international prices, its well established (and now ageing) stock of generating plant and its predominantly above-ground (and therefore lower cost) electricity networks.

The AEMC's "possible future electricity prices" reports have shown that most of the price increases so far have been attributable to increases in regulated network services provider (NSP) charges. The rate of increase in NSP charges since 2007 has far exceeded the rate of increase in their outputs (such as number of connected customers, peak demand met, and energy distributed).

Rapidly rising inputs and stagnant or slowly growing outputs has resulted in a steep reduction in the productivity of the electricity industry. This is shown in recent research published by the Productivity Commission, in data compiled by the Australian Bureau of

Statistics and also in research published by the Independent Pricing and Regulatory Tribunal (IPART) of New South Wales.

The Productivity Commission's research notes that while electricity supply is a relatively small part of the Australian economy, its productivity decline has been so substantial that it has become a significant part of the explanation of Australia's aggregate productivity challenges.

As the AEMC is aware, research that we have commissioned has found that there has been a big difference in the expenditure performance of government and privately owned distribution network service providers. This results in a big difference in their relative efficiency. The Australian Energy Market Operator has drawn similar conclusions when comparing the expenditure and outputs delivered by government-owned and privately-owned transmission network service providers.

While energy users are bearing the brunt of the extraordinary price rises and productivity declines, shareholders have benefitted through rapidly growing regulated asset bases. As these asset bases have expanded, state governments that own around 75% of the regulated network service provider assets, have derived significant and expanding income from their profits, the income taxes on those profits and the debt guarantee fees that it charges the NSPs that it owns. The resulting pain experienced by energy users has been to the gain of the industry and its shareholders.

It is in this context that the AEMC is conducting assessments of the rule change proposals by the AER and Energy Users Rule Change Committee. These rule changes have the potential to significantly impact electricity prices for the betterment of electricity consumers and provide them with much needed relief from the unprecedented increases in electricity prices.

Overall we are very disappointed in the AEMC's response to this major issue as outlined in its Directions Paper. The AEMC has not drawn attention to the price increases or productivity declines, or examined the profitability of the industry. Indeed, there is no evidence that the AEMC has itself compiled any research or analysis of the problem, notwithstanding its magnitude. By failing to recognise that there is a serious problem, the AEMC is sending a signal to electricity consumers and the broader community that it supports the high prices that network service providers are charging.

The framework the AEMC presents for analysing the problem is to differentiate failures in regulatory design from failures in the implementation of regulation and the conduct of regulation. Indeed, the AEMC's Chairman's opening remarks at the forum on its Issues Paper for this review, held in November 2011, was to draw attention to this distinction by way of hosing down expectations of what might be achieved through changes to the design of regulation. We assume that this reflects an AEMC view that it is not the job of regulation to compensate for, or correct, failures in governance.

It may be hard to argue that the design of regulatory frameworks should be held accountable for failures in the conduct of regulation or the governance of the industry. But this misses the point that regulatory design, more than any other factor, can determine whether it is energy users or shareholders that bear the consequences of failures in the conduct of regulation or the governance of the industry. Moreover, network regulation in Australia, which is meant to apply incentives on network businesses to find more efficient ways of providing their services, needs to do this regardless of ownership or other governance issues. This is what energy consumers were told they were getting with the network regulatory, ownership, structural and governance reforms of the 1990s.

Our assessment is that there are significant failures in regulatory design, the conduct of regulation and industry governance, particularly where state governments own their NSPs. Often these three factors interact, with failures in one area making failures in others more likely. The inter-relationship between design, conduct and governance also means that it is difficult to be certain where the greater proportion of the reason for the observed outcomes lies. However, this does not imply that regulatory design is not important, or that expectations should be tempered as to what changes in design might achieve. To the contrary, we suggest that this inter-relationship serves to emphasise the importance of regulatory design, and specifically that regulatory design takes account of weaknesses in regulatory conduct and industry governance.

To be clear, we suggest that it is the AEMC's task – having regard to the long term interest of consumers – to ensure that the regulatory design compensates (as much as possible) for weaknesses in the governance of government-owned NSPs. In its recent draft report on proposed regulated household electricity prices in New South Wales, IPART has pointed to governance failures in the Government's role as owners of the New South Wales Distributors. We suggest that the AEMC cannot ignore this reality – as it has - but instead must design regulations that protect the long term interest of consumers against these failures.

The AEMC's review of the proposed changes needs to be wide-ranging, evidence-based and holistic. We are concerned that this has not yet happened, and in the first instance call on the AEMC to extend the involvement of Professors Yarrow and Littlechild to all aspects of this review, including the allowed rates of return. We welcome the involvement of these internationally recognized expert advisors, but they must be given the necessary latitude to develop their own analysis and to suggest their own solutions, unconstrained by existing narrow terms of reference for their involvement.

Our specific comments on various issues in the Directions Paper can be summarised as follows:

1. We suggest that the AEMC has unreasonably dismissed the Energy Users Rule Change Committee's proposal to ensure that the allowed return on debt for government-owned NSPs is related to the cost of debt. We agree with the EURCC's critique of the AEMC's analysis in its Directions Paper and we support the EURCC's recommendation that the AEMC reconsider its submission.
2. In our opinion the main problem with the "capex and opex framework" is that the onus of proof that regulatory expenditure allowances are efficient, rests with the AER instead of the NSPs. This is an easy issue to resolve and is one of the most important changes that we think the AEMC should make. We are concerned that the AEMC has not supported the AER's proposed solution.
3. We think the power of efficiency incentives need to be significantly strengthened to ensure that shareholders, rather than consumers, are exposed to the consequences of lax expenditure controls. While the AER's 60/40 split bears further detailed examination, we suggest that the AER's proposals are directionally sound and should be considered further. We are very concerned that the AEMC has found no fault with the existing incentives. This reflects an unsustainable assumption that differences between the allowed return on capital and the actual cost of capital are not significant in the evaluation of the incentive.
4. We suggest that there may be a case for greater intra-period adjustment of expenditure allowances, but such changes need to be considered carefully. They can diminish incentives to control costs, and can result in more laborious regulatory processes that further diminish the ability of consumers to contribute to

implementation of regulation. At the very least any change that reduces the risks borne by NSPs must be reflected in lower allowed rates of return.

5. We agree with the AEMC that arrangements for the determination of the rate of return should be subject to review, like other AER regulatory decisions. However, we also believe that elements of the rate of return calculation that can reasonably be specified in the Rules, should be specified in the Rules. This will promote investment and price certainty, will simplify regulatory processes and will guard against further dispersal of end user advocacy resources.
6. We think that the regulatory process concerns that the AER has raised are valid, but believe that these concerns will diminish once the onus of proof of efficient expenditure is correctly re-established on network service providers.

Finally, we note with interest the outcome of the April 2012 Council of Australian Governments (COAG) meeting. The Communiqué of that meeting said that the next COAG meeting will consider proposals to bring forward reviews of energy markets to ensure that energy regulation places greater weight on the outcomes for consumers. It is exactly this – greater weight on the outcomes for consumers - that we are asking of the AEMC in its review of these rule change proposals.

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1 Introduction

This document is the Energy Users Association of Australia's (EUAA) submission to the AEMC on its Directions Paper on its review of network regulation rule change proposals put by the Australian Energy Regulator (AER) and the Energy Users Rule Change Committee (EURCC).

The EUAA is the national association of energy users – electricity and gas. The combined energy use of EUAA members accounts for a significant proportion of energy consumed in Australia and our members make a substantial contribution to the national economy in terms of production, investment, employment and regional activities. We have around 100 members including major energy users, across many industries and all States. We welcome the opportunity to provide a submission to the AEMC's review, in view of the importance of network regulation to energy users.

Network charges typically make up around half of an electricity bill, have risen dramatically in recent years and been the main cause of the rapid increases in electricity prices seen in all States. The AEMC would be well aware that these increases are a major concern to household and businesses electricity consumers. The AEMC review of network regulation rule change proposals is therefore a significant opportunity to deal with this problem.

Overall, the EUAA is very disappointed with the Directions Paper. We consider that it underestimates the problem and fails to adequately consider the proposals that have been made by both the AER and the EURCC. By failing to recognise that there is a serious problem, the AEMC is sending a signal to electricity consumers and the broader community that it supports the high prices that network service providers are charging. This is a serious concern to the EUAA and its members.

This submission is set out as follows:

1. Section 2 provides evidence of the seriousness of the price and productivity problems, at the heart of which is the increases in network service provider charges in all states but especially from those owned by jurisdictional governments;
2. Section 3 provides general comments about the approach that the AEMC appears to be taking to these rule change proposals; and
3. Sections 4 to 7 sets out our response to each of the chapters of the AEMC's Directions Paper.

2 Evidence of a problem

The AEMC's Directions Paper suggests that there is limited evidence of a problem, and broadly seems to conclude in many areas that the case for changes to the Rules has not been made. We strongly disagree with the AEMC on both of these matters and on many other aspects of its Directions Paper. The AEMC's apparent insensitivity to the increases in electricity prices and their impacts on the community is difficult to understand.

This section provides a brief review of outcomes in the NEM. We hope that this may help the AEMC to understand better why energy users do not believe that they are being well served by the existing approach to network regulation. We suggest that this evidence points to the need for far more serious and urgent reforms than the AEMC seems to be minded to pursue.

The review begins with international electricity price comparisons and progressively explores various areas in greater detail. This survey presents evidence based on data and analysis provided by Carbon Market Economics (CME), the Australian Bureau of Statistics, the AEMC, the Productivity Commission, Bruce Mountain, the EUAA and the Australian Energy Market Operator (AEMO).

2.1 Rising electricity prices

Figure 1 ranks electricity prices in Australia in 2011 compared to those in other developed economies. It is based on the report by CME for the EUAA "Electricity Prices in Australia: An International Comparison"[1]. Figure 1 shows that in 2011, at average 2011 exchange rates, electricity prices in Australia's main states are amongst the highest in the developed world. Rising electricity network charges explains most of the price increases in most part of the NEM (with the exception of Victoria).

Further price rises in New South Wales and Queensland (from 1 July) is likely to mean that from July this year New South Wales households will, on average, be paying more for their electricity than any of the other 91 countries, states and territories in this comparison. Queensland household electricity users will not be far behind.

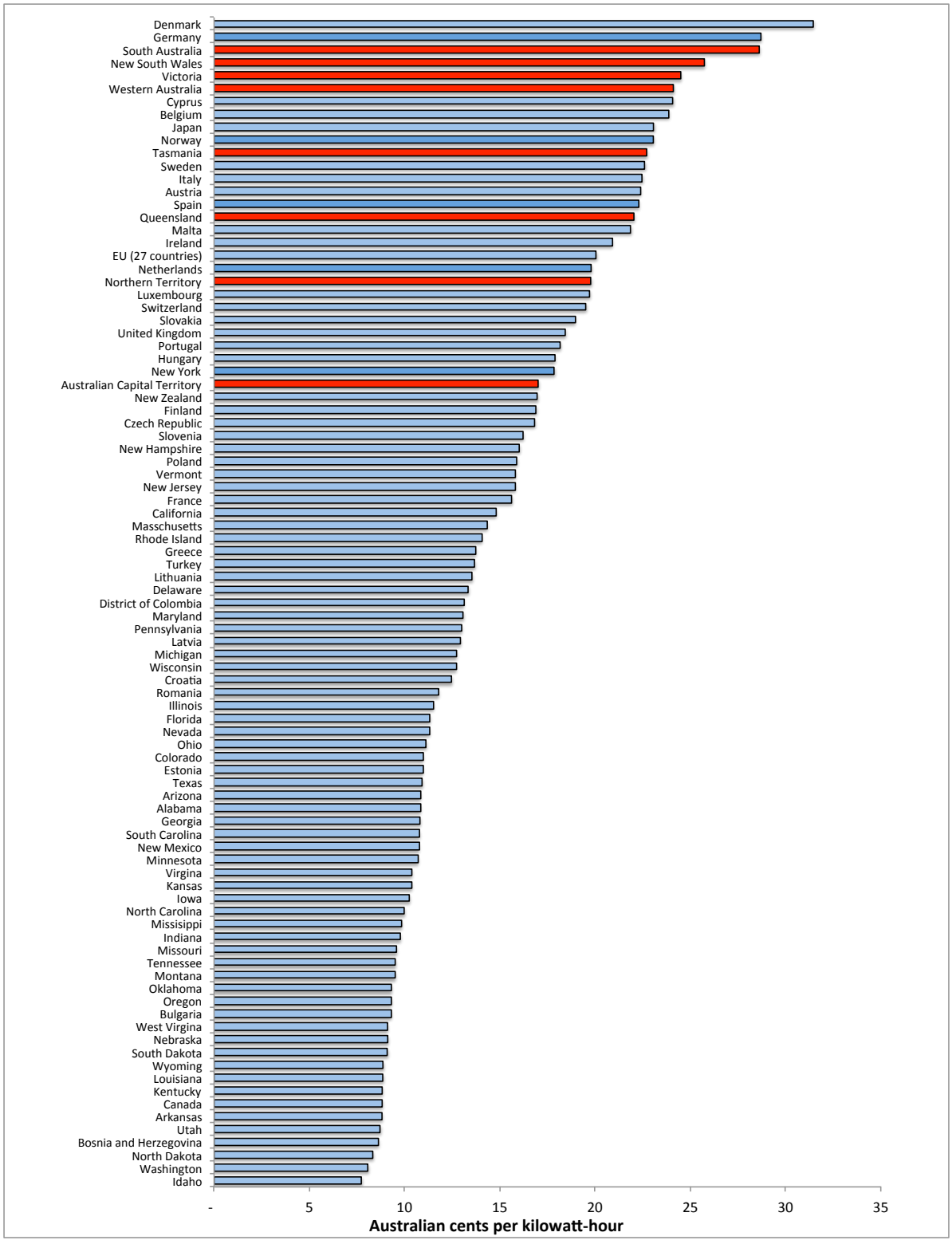
Australia's declining international competitiveness in electricity particularly since 2007 is attributable mainly to rising prices in Australia, relative to those in other countries as shown in Figure 2.

The appreciation of the Australian dollar, particularly relative to the US Dollar and Euro has also increased the gap between Australian prices and those in the EU and U.S. However the Australian Dollar has declined relative to the Japanese Yen and so this has narrowed the gap between Australian and Japanese electricity prices. To be clear, the appreciation of the Australian dollar (relative to the Euro and US Dollar) since 2007 is a less significant factor than the rising in electricity prices in Australia in explaining the Australia's ascendancy in international electricity price rankings.

The AEMC has projected that household electricity prices will rise by 37% between 2011/12 and 2013/14. If this happens (and we have reason to believe that the actual price increase may be even higher than this) then the electricity prices in most Australian states are likely to be higher than in all other developed economies, by a significant margin. This would be a remarkable outcome considering the many advantages Australia enjoys, relative to so many other developed economies, in its access to energy resources.

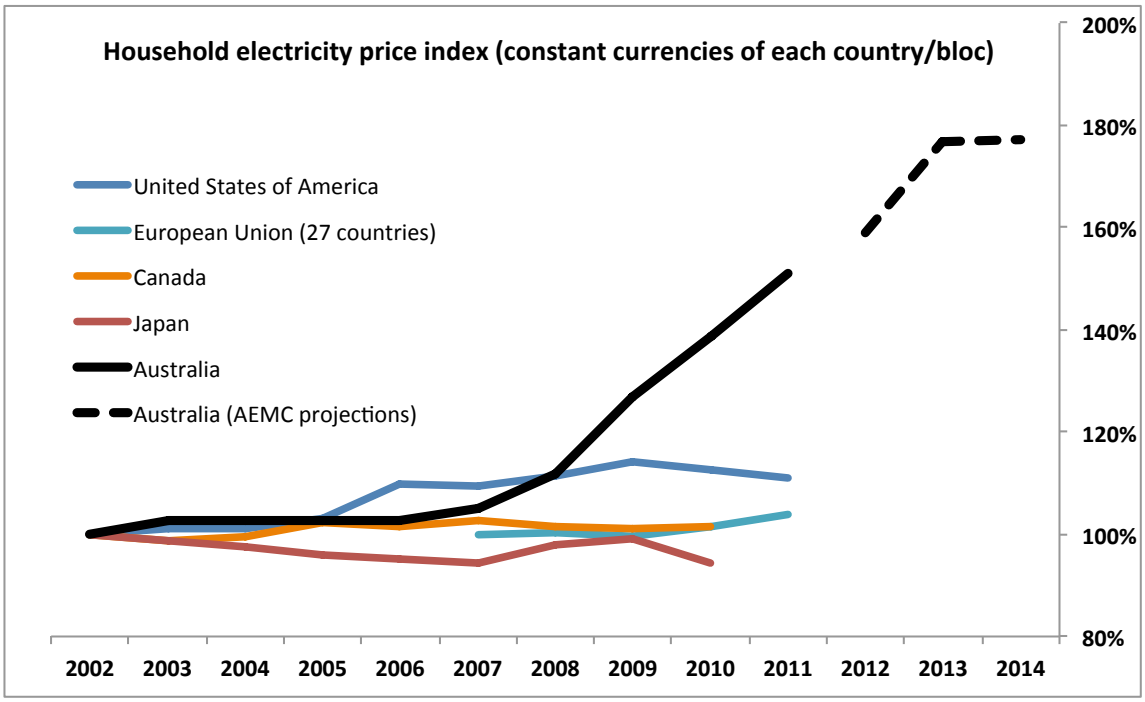
[1] Available from http://www.euaa.com.au/publications/papers/

Figure 1. 2011 household electricity prices by country, state and province



Source: *Electricity prices in Australia: An International Comparison, CME, March 2012*

Figure 2. Household electricity price index



Source: *Electricity prices in Australia: An International Comparison, CME, March 2012*

Even without further price increases in the pipeline, the rise in real electricity prices since 2007 (and in real utility prices more generally) is without historical precedent, being about double the increase that occurred in the last episode of rising prices, that in the early 1980s following the rapid growth in electricity capacity to fund the expansion of the resources and aluminium industry. The surplus capacity (principally in generation) still had to be paid for, even though large parts of it were not actually needed. This contributed to the pressure for major electricity sector reform in the 1990s.

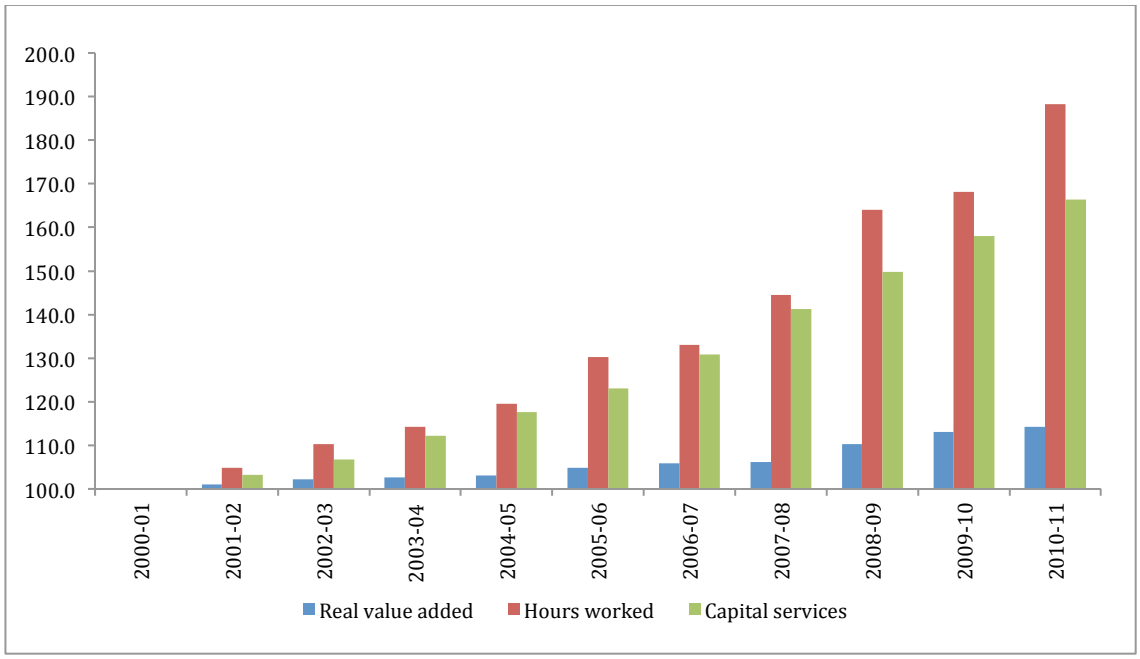
The AEMC's own analysis attributes the greatest part of the historic and expected price rises to network charges. Of this, government-owned networks have had far higher allowed price increases compared to their privately owned peers.

2.2 Declining productivity and efficiency and rising costs

Rapidly rising prices, but much slower growth in outputs is reflected in declining productivity. Figure 3 shows the real value added, hours worked and capital services for the electricity, gas and water sector in Australia (of which electricity is by far the biggest component).

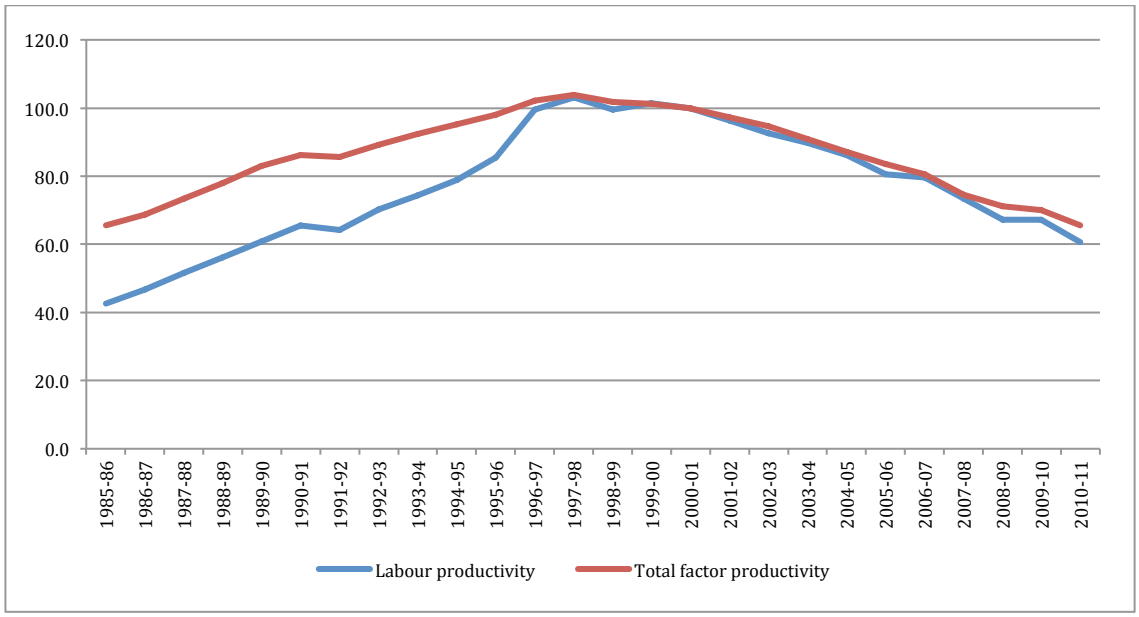
Figure 3 shows that over the decade from 2000 to 2010, the real value added rose about 10% while capital services rose about 70% and hours worked about 90%. Clearly small gains in value have been accompanied by sizeable increases in capital and labour inputs. This translates into declining productivity as shown in Figure 4. This shows that the total factor productivity of the electricity gas and water sector has collapsed over the decade from 2001 to 2010, erasing all of the productivity gains that were made during the previous 15 years.

Figure 3. Real value added and capital service use, and hours worked, electricity, gas and water and sewerage industry, Australia, 2000-11 to 2010-11 (indexes 2000-01=100)



Source: Australian Bureau of Statistics (ABS) 2011, *Experimental Estimates of Industry Multifactor Productivity 2010-2011, Australia: Detailed Productivity Estimates*, Cat. No. 5260.0.55.002, December, Canberra, at http://www.abs.gov.au/ausstats/abs@.nsf/mf/5260.0.55.002

Figure 4. Labour productivity and total factor productivity, EGW, Australia, 1985-86 to 2010-11 (indexes 2000-01 = 100)

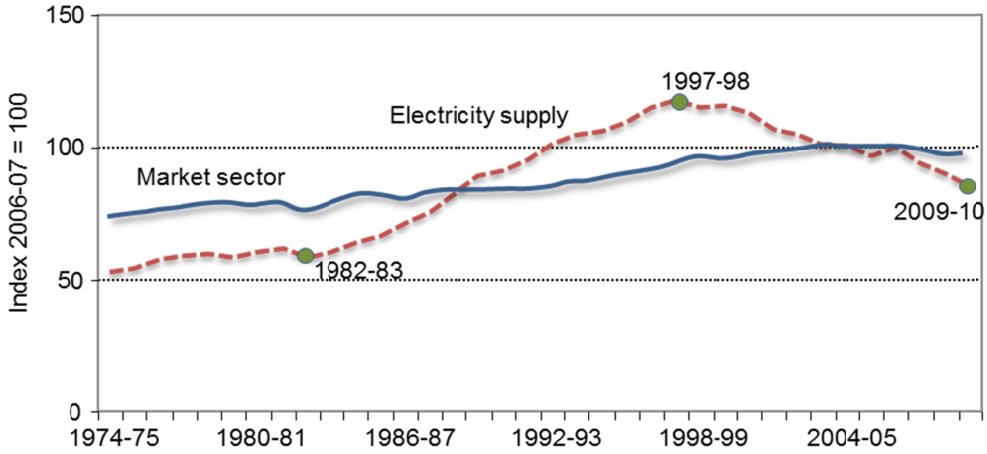


Source: Australian Bureau of Statistics (ABS) 2011, *Experimental Estimates of Industry Multifactor Productivity 2010-2011, Australia: Detailed Productivity Estimates*, Cat. No. 5260.0.55.002, December, Canberra, at http://www.abs.gov.au/ausstats/abs@.nsf/mf/5260.0.55.002

The Productivity Commission in their estimate of multi-factor productivity provides another estimate of the extraordinary decline in productivity of the electricity sector. This is shown in

Figure 5. This shows a decline in the multi-factor productivity of the electricity sector of around 30% relative to the market sector, in the decade to 2010.

Figure 5. Measured electricity sector productivity



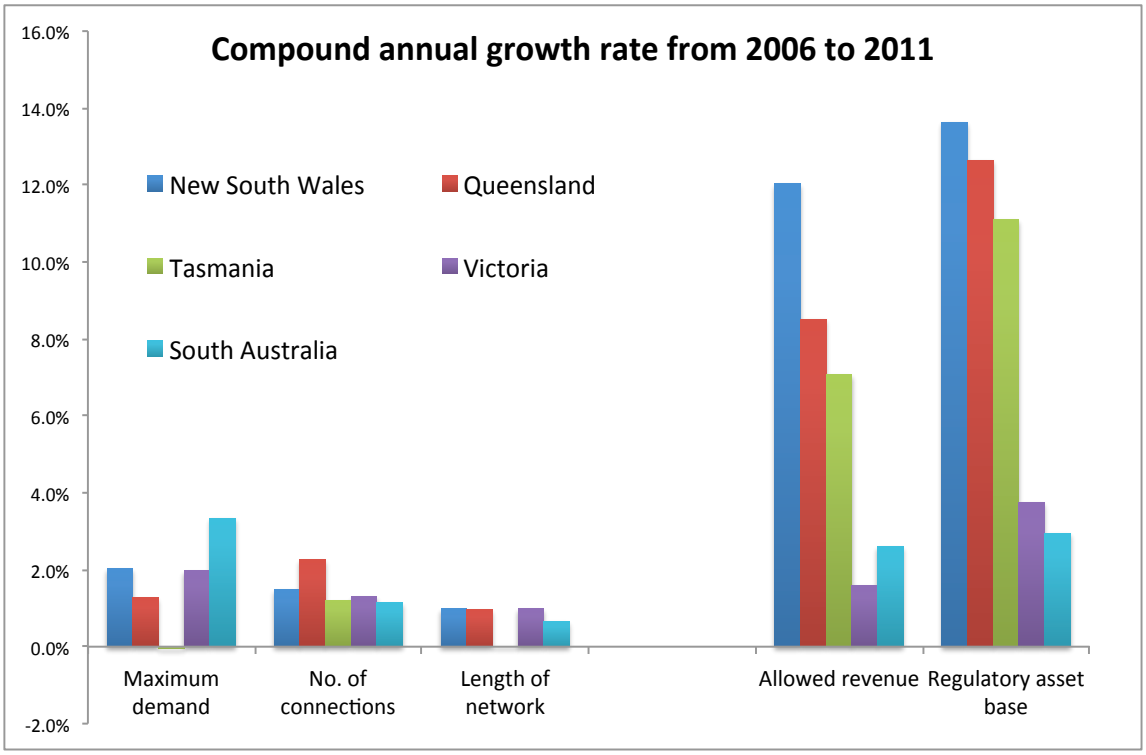
Source: Electricity Network Regulation, Productivity Commission Issues Paper, February 2012.

To understand this productivity decline in greater detail, we have used our own database of regulatory decisions and other public data to examine how the allowed revenues and regulated asset bases of distributors in the NEM has changed compared to the expansion in the services they provide (expanding network, connecting new customers or meeting maximum demand). This is shown in Figure 6 which compares compound annual growth rates of maximum demand, new connections and the length of the network, compared to changes in the allowed revenue and regulated asset bases. It is clear from this that the allowed revenues and asset bases, particularly for the government-owned NSPs operating in NSW, QLD and TAS have grown far more quickly than demand, new connections or length of network.

The expansion of allowed revenue relative to number of connections is shown in Figure 7. It is clear from this that regulated revenues per connection have risen more quickly for government-owned NSPs than for privately-owned NSPs.

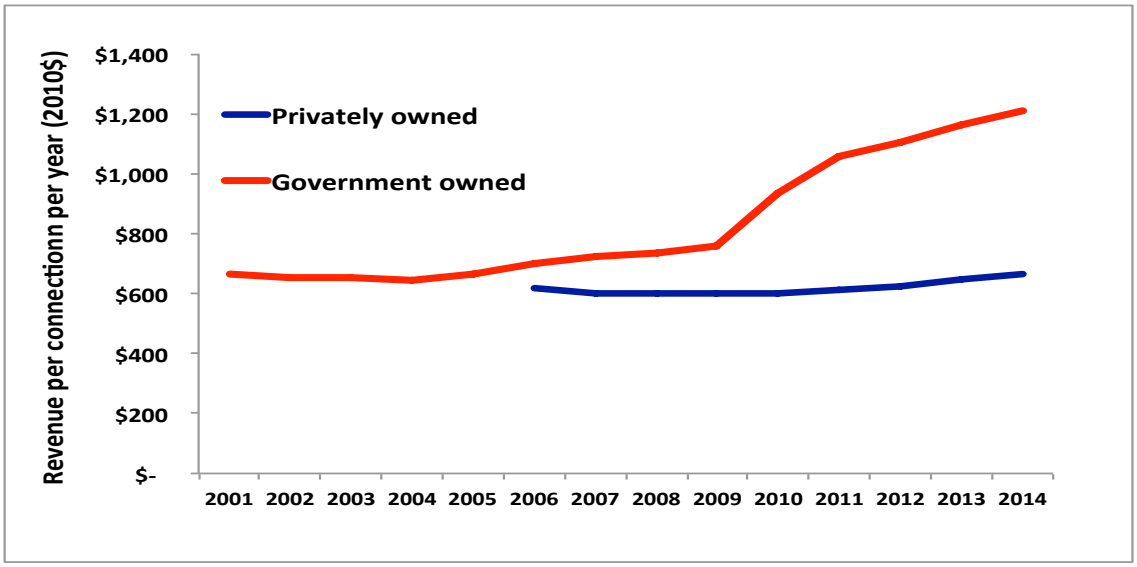
The clear gap in the efficiency of the privately-owned and government-owned distributors is shown in Figure 8 which compares the relative efficiency of distributors in the regulatory period (RP) currently underway, compared to the change in their efficiency between the first and third regulatory periods. The benchmarking methodology underlying this result in set out in Mountain (2011).

Figure 6. Compound annual growth of inputs and outputs of distributors in the National Electricity Market[2]



Source: EUAA analysis based on published regulatory decisions and ESAA data

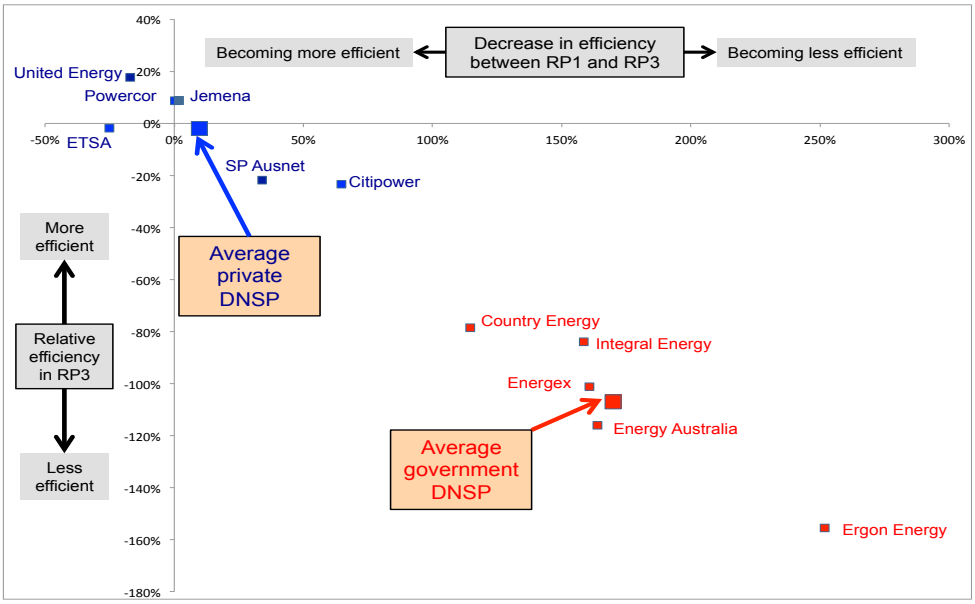
Figure 7. Revenue per connection for government and private distributors



Source: "*Australia's rising electricity prices and declining productivity: the contribution of its electricity distributors*", a report to the Energy Users Association of Australia by Bruce Mountain, May 2011.

[2] Note that demand is the simultaneous state-wide maximum demand in each state. Data for the simultaneous maximum demand for each distributor for 2011 is not yet available. We expect that the compound annual growth rates for demand for each distributor will differ from the compound annual growth rates calculated from the state-wide maximum demands. However, we do not expect that these differences will be significant.

Figure 8. Benchmarking relative efficiency and changes across regulatory periods.



Source: "*Australia's rising electricity prices and declining productivity: the contribution of its electricity distributors*", a report to the EUAA by Bruce Mountain, May 2011.

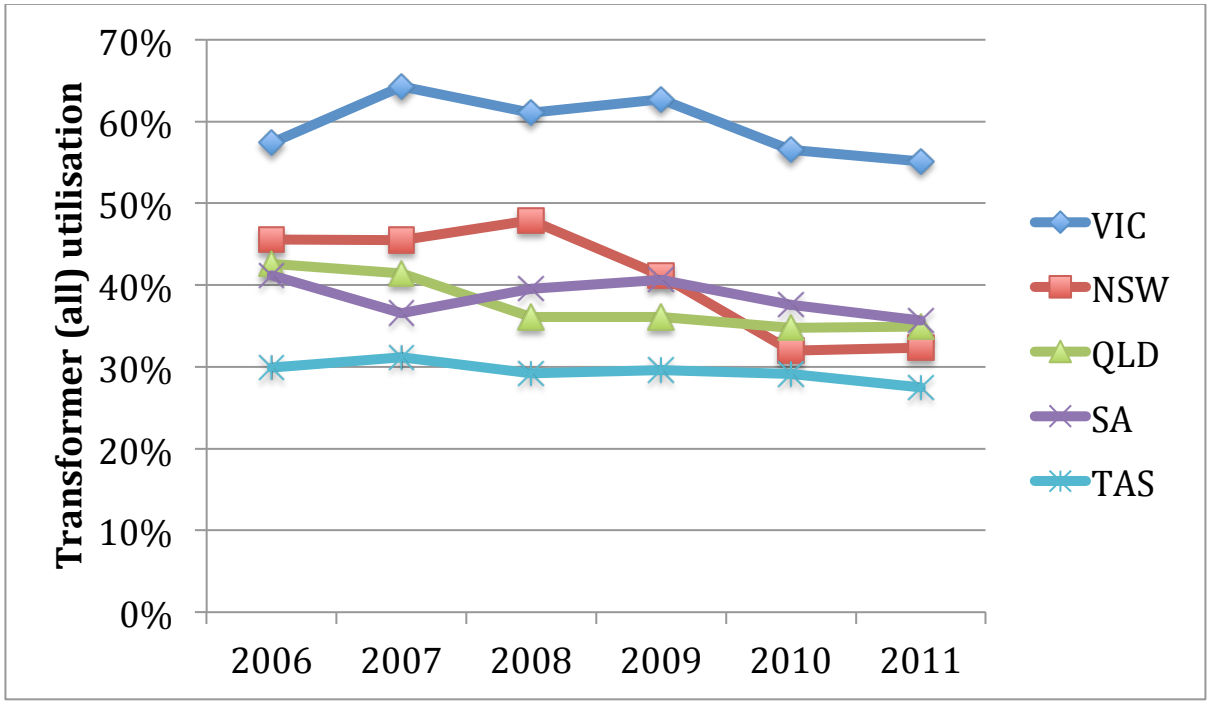
The AEMC has in the past suggested that the rise in the price of network services is explained by rising peak demand, ageing assets and catch-up investment. As the AEMC is aware, Mountain (2011) concluded that these exogenous factors may explain part of the increase but that government-owned NSPs had spent very much more to meet increases in demand or to connect new customers than privately owned NSPs.

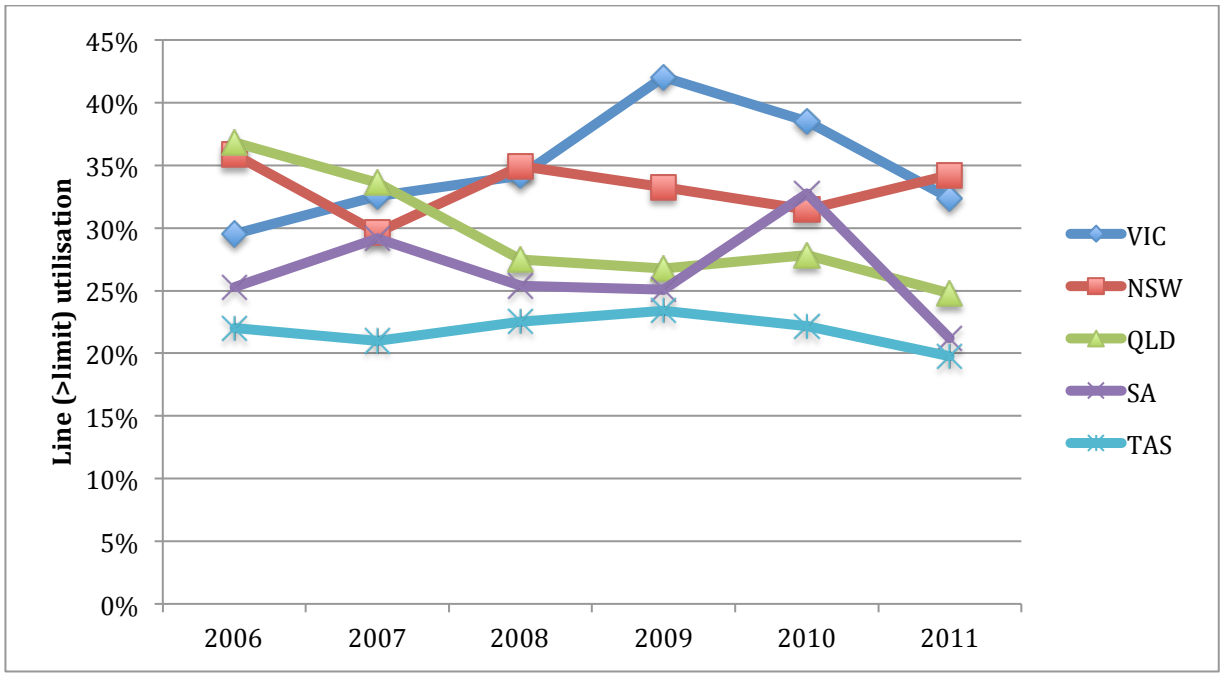
Similarly with respect to expenditure on ageing assets, Mountain (2011) showed that the average remaining life of assets owned by private distributors was shorter than for government NSPs and yet government NSPs spent very much more to replace what they claimed to be ageing assets.

With regard to transmission network service providers, AEMO presents some comparative assessment that agrees with the government/private differentiation in distribution networks in Mountain (2011). Figure 9 shows AEMO's calculation of the utilisation of transformers and lines on the main transmission system. Again the privately owned Victorian transmission networks show significantly better utilisation than the government-owned networks elsewhere.

Figure 10 shows the average annual growth in the Regulatory Asset Base (RAB) from 2006 to 2011 compared to the average annual growth in demand and, in the second chart, the augmentation capex compared to the utilisation of the network. These charts confirm that government-owned transmission network service providers are spending much more to meet (lower) peak demand growth than privately owned ones, and that relatively under-utilised government-owned transmission networks are incurring far higher augmentation capex than privately owned ones. This comparison for transmission NSPs accords with the observations in Mountain (2011) for distribution NSPs and also with the data presented in Figure 6 in this submission (also relevant to distribution NSPs).

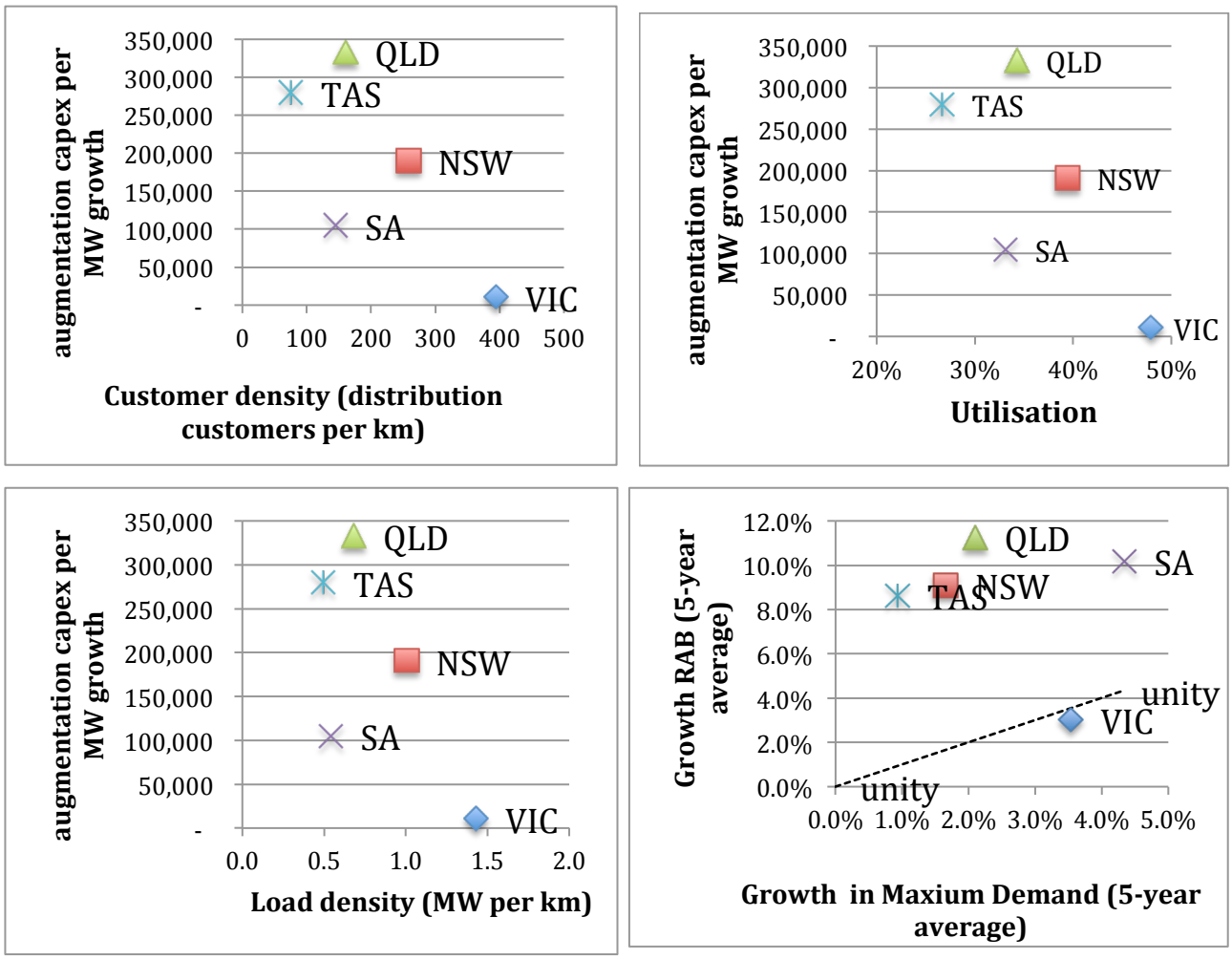
Figure 9. Transformer and transmission line utilisation rates for transmission network service providers





Source: "*Submission to transmission framework review first interim report*", Australian Energy Market Operator, February 2012.

Figure 10. Comparison of expenditure metric for transmission network service providers



Source: "*Submission to transmission framework review first interim report*", AEMO, February 2012.

Finally, in addition to these data and reports, the AEMC will be aware of the comments (as set out in the EURCC's Issues Paper) of several eminent economists and officials, including Professors Tom Parry and Ross Garnaut, Mr Mark Duffy and Mr Rod Sims (at the time Chairman of IPART), all of whom support our contention that there is a serious efficiency problem attributable to failures in network regulation.

In the examination of the evidence of a problem, IPART's recent draft report "*Changes in regulated electricity retail prices from 1 July 2012*" merits attention. In this report, IPART reiterates the main points of its submission to the AEMC on the AER's rule change proposals. It also draws attention to failures in the governance of the New South Wales Government in respect of NSPs that it owns. The report alludes to "*a significant gap between how the corporatisation principles were envisaged to apply and how they are being applied in practice*". We have no reason to disagree with IPART's analysis. However we would like to draw special attention to the fact that through the Rules, this governance failure has been at the expense of electricity consumers in New South Wales. The NSW Government has enjoyed sharply higher profits, income tax equivalents and debt guarantee fees as a result of this governance failure - at the expense of the sharply higher prices paid by electricity users. While IPART attributes part of the blame to poor governance, it should be remembered that it

is the Rules, not the New South Wales Government, that determines who has borne this governance failure.

2.3 Summary

We are concerned that the AEMC's Directions Paper seems unconvinced about the seriousness of the problems in energy network regulation, including those issues raised in the EURCC's and AER's rule change proposals. This sub-section has provided evidence of the extraordinary price rises and productivity declines in network service provision in the NEM. We hope that this explains why we suggest that the AER and EURCC's rule change proposals demand profound and urgent response by the AEMC.

3 General comment on the AEMC's approach

This sub-section provides some general comments on the AEMC's approach. These comments apply to much of the Direction Paper although in parts of our response to specific areas of the Paper we draw attention to these comments again.

3.1 Gathering the Evidence

The rule change proposals by the AER and EURCC are profoundly significant. For this reason it is remarkable that the AEMC seems to have made so little effort itself, through its own research and examination of the data, to discover whether there is a problem with network regulation, and if so its magnitude and type. Indeed there seems to be no evidence that AEMC has so far undertaken any quantitative analysis itself and its is clear from the Directions Paper that the only quantitative research that the AEMC intends to undertaking itself (following the Directions Paper) is to understand the reason for capex overspending by some NSPs against their regulatory allowances. Whilst this is important, it is only part of the analysis that should be undertaken to establish the threshold issue of whether there is a problem. As the AEMC knows, network charges represent half of the cost of delivered electricity (slightly less for gas) and the way they are regulated is a key issue for energy users.

In the Issues Paper, the AEMC exhorts the AER and the network service providers to provide it with evidence, and to critique existing analysis. While there is nothing wrong with asking this of stakeholders, we strongly urge the AEMC to seek out and evaluate the evidence itself and not just rely on information and analysis provided to it by stakeholders. Indeed we consider that this is a necessary requirement in fulfilment of the AEMC's obligations under the Law.

3.2 Regulatory design, implementation and industry governance

In this review the AEMC appears to have placed considerable emphasis on distinguishing three possible reasons for the observed outcomes: regulatory design, regulatory conduct and governance. When the AEMC has drawn attention to this distinction, such as by its Chairman at the Issues Paper forum in Brisbane in November 2011, the point has been made that there should be realistic expectations of what might be delivered through changes to the Rules. It also seems that by categorising the issues in this way the AEMC appears to be drawing attention to the question of whether regulatory failures might be better explained through failures in regulatory implementation and industry governance, rather than the design of the regulations.

We agree with the AEMC that there is merit in understanding the factors that determine regulatory success or failure and analysing problems under these three headings. This can deliver a more precise statement of the problem, and hence facilitate clearer and more precisely targeted solutions.

However, we are concerned that through this categorisation the AEMC be tempted to conclude that problems in governance and regulatory conduct undermine the importance of regulatory design. Or, to put it a different way, by pointing to problems in regulatory conduct and industry government, the AEMC might be less inclined to resolve the problems in regulatory design.

We think this would be a mistake. For a start, the line between design, implementation and governance can not always be clearly drawn. And the three "dimensions" are inter-linked in other ways: better design may promote better implementation; better governance may also promote better design and better implementation. In other words, we suggest that in many ways they are not clearly separable. Finally and most importantly, we suggest that regulatory design has special significance since failures in design not only affect outcomes, but they also affect who bears the consequences of those outcomes that we alluded to earlier in relation to IPART's comments. The steep rise in electricity prices and decline in industry productivity has been at the expense of the industry's consumers, not its shareholders. It is regulatory design, not industry governance or regulatory implementation that has determined this.

We encourage the AEMC to consider a more holistic assessment of the problem by situating the consideration of regulatory design in the context of its implementation and the industry governance arrangements. Specifically this might mean:

- Ensuring that design takes account of weaknesses in industry governance. This applies particularly to government-owned NSPs where the evidence suggests that their ability to control expenditure is very much weaker than their privately owned peers. Regulatory design can deal with this by ensuring that it caters for differences in industry governance attributable to differences in ownership; and

- Having regard to what the AER considers to be the constraints in the Rules that impede it from making decisions that it considers to be consistent with the NEO. Others have argued that the AER has whatever power it needs to do its job, while the AER has claimed that it does not. Resolving this difference need not be a constraint to change. To the extent that there would be no detriment to allowing greater authority to the AER, we would encourage the AEMC to consider this.

3.3 Comparative analysis

We strongly believe that comparative analysis is essential in developing and assessing the evidence of a problem, and then designing targeted solutions. We are concerned that the AEMC appears to have had little regard to this in framing its Directions Paper. Furthermore, as we understand from the Directions Paper, the AEMC appears to continue to have little regard to such comparative analysis in future.

The only area where we understand the AEMC intends to develop a comparative analysis is to check whether the Chapter 6A "policy intent" is consistent with the actual practice of other regulators. Its not clear to us what this means. If it reduces to a parsing of the NEO to confirm whether it accords with accepted best practice in the economic regulation of network monopolies, then we can predict with confidence that the policy intent will be found to be appropriate. But this, surely, is not informative. Comparative assessments should be made of actual outcomes not of intentions and "intent" and objectives. As such the comparative assessment that we encourage the AEMC to undertake is of the actual outcomes that has been delivered under Chapter 6A (and Chapter 6) compared to those delivered under previous jurisdictional government regimes and outcomes that have been delivered in other countries.

4 Capex and Opex allowances

This section responds to the regulatory design issues that are described and reviewed in Chapter 3 of the Directions Paper.

The issues that this chapter deals with are, in our view, amongst the most important of all those that are being reviewed by the AEMC pursuant to the AER's rule change application. This section describes the problem as suggested by the AER, NSPs, consumers and governments, the AEMC's advisors and finally the AEMC. It then presents a critique of the AEMC's initial conclusions and its proposed approach. Finally we set out our perspective of the problem and the solutions that the AEMC should consider.

4.1 Stakeholders' statement of the problem

AER

The AER proposes that it should not have to justify its decisions on NSP opex and capex allowances with reference to the proposals put to it by NSPs. It says that it has been forced into a line-by-line assessment of expenditure proposals by the NSPs, and that it has been constrained in its ability to apply benchmarks in its determination of expenditure allowances. It suggests that both of these have worked to the advantage of NSPs and the expense of consumers.

NSPs

The NSPs say that there is nothing constraining the AER from setting efficient expenditure allowances, and that the AER has been able to benchmark as it wished to. The NSPs suggest that the requirement that the AER takes account of the specific circumstances of the distributor are valid requirements.

Retailer, jurisdictional regulator, consumer and government views

IPART, consumer representative organisations, the South Australian and Victorian Governments are generally supportive of the AER's proposal. In general their interpretation of the AER's proposal is that the AER is seeking to given more power and flexibility to determine expenditure allowances.

Advisors

In a general comment, Professors Littlechild and Yarrow seem to suggest that the AER has not made a case for changes to the regulatory regime. Nevertheless both professors incline to the view that the AER should have more discretion than it currently has.

4.2 AEMC's directions

The AEMC begins its assessment by pointing to regulatory design as just one factor (governance of NSPs and regulatory implementation by the AER being the other two) that affects outcomes. By implication, the AEMC seems to be suggesting that undue focus on failures in regulatory design is not warranted, and also that it would be unrealistic to expect that remedying flaws in regulatory design will necessarily result in significantly better outcomes.

The AEMC then suggests that there is disproportionate focus on high prices, and that if prices were lower than needed to meet "relevant objectives," this would not be in consumers' long-term interest.

The AEMC suggests that it is not convinced that the AER has too little authority or flexibility. It also concludes that the AER has been able to benchmark expenditure as it needs to and so it sees no need to change the rules in respect of benchmarking.

The AEMC notes the evidence provided by Mountain and Littlechild (2010) and Mountain (2011) but says that this evidence does not "conclusively" rule out asset ageing, rising peak demand and quality changes as factors requiring greater opex and capex.

The AEMC considers that the policy intent underlying Chapter 6 is consistent with the actual practice of Ofgem in Britain.

In summary, the AEMC's initial conclusions seem to be that:

- The AER's is able to set efficient opex and capex allowances under the current rules; and
- If NSP's opex and capex allowances are too high it, it is not because the AER lacks flexibility or authority.

4.3 Comment on the AEMC's directions

We are concerned about many aspects of the AEMC's underlying thinking and the AEMC's analysis in this area.

Firstly, we do not dispute that regulatory design is but one significant factor affecting outcomes (the others being the conduct of regulation and industry governance). We also do not dispute that improving regulatory design is no guarantee of efficient outcomes. The AEMC seems to point this out as if to lower the importance of good regulatory design, and by extension, lower expectations of the efficiency improvements that might be expected from better design. This reflects comments that the AEMC has made on other occasions, that it is not the job of the regulator to correct for failures in industry governance. But this seems to miss the point that it is the design of regulations that determine whether it is consumers or shareholders who bear the consequences of weaknesses in regulatory conduct and governance. While good regulatory design is necessary but not sufficient to ensure good regulatory outcomes, bad regulatory design is sufficient to ensure that consumers bear the consequences of bad regulatory outcomes.

Secondly, the AEMC has overlooked the fact that the higher prices that are currently the subject of so much community, business and political focus, are at consumers' expense, not the industry's shareholders' expense. While consumers are suffering the pain of higher prices, the owners of Australia's network service providers are enjoying the fruit of these higher prices in the form of corporate valuations at a substantial premium to their current cost regulated asset bases (in the case of privately owned NSPs), and governments that are extracting additional profits, taxes and fees from the NSPs they own. Evidence of this can be seen in the financial analysts' reports that the AEMC itself cites in the Directions Paper and also in the EURCC's proposal, the New South Wales Treasury's response to their proposal and the EURCC's rebuttal of the NSW Treasury's response.

Third, we are concerned at the way that the AEMC has drawn attention to the possible detriments of low prices, as if the alternative to high prices is excessively low prices that

would jeopardise security of supply. Consumers would not dispute that prices need to be at levels needed to attract investment to meet reliable supply. But why does the AEMC feel the need to point this out? Why is the AEMC so concerned about the attention that has been drawn to high electricity prices, that it feels the needs to point to possible detriments associated with low prices? Does this suggest a lack of understanding by the AEMC of the magnitude of the recent price increases and their cause or perhaps an underlying bias in the AEMC's assessment of the problem?

Fourth, the AEMC's analysis of the AER's ability to benchmark is also a concern. The AEMC concludes that the AER has been able to develop and use benchmarks in the determination of opex and capex allowances and has been unconstrained in this. We suggest the evidence does not support this. For example, we point to the critique of the AER's benchmarking set out in the EUAA's submission on the AER's Draft Decision for the revenue and price controls for the distributors in Queensland and South Australia. These submissions are available from the AER's website. Our analysis of the benchmarking undertaken by the AER for these decisions was that:

1. There was no evidence of capex benchmarking, of any form;
2. The AER defined a role for benchmarking opex that was inconsistent with its obligations under the Rules;
3. The AER failed to define the benchmark efficient opex as it is required to do under the Rules;
4. The AER benchmarked *historic* expenditure (not the proposed expenditure for the regulatory period for which the price/revenues controls were to be established); and
5. There is no evidence that the AER took account of the opex benchmarking that it did do, in setting opex allowances.

Similar comments can be made about the AER's benchmarking in the distribution decisions for distributors in Victoria and New South Wales.

The AEMC could argue (as it does) that the AER is empowered by the Rules to develop benchmarks, it is just that the AER failed to do this. We agree with this to a point. However, in the AER's defence, we agree that the AER's argument that the obligation in the Rules for the AER to take account of the specific circumstances of NSPs, and also its obligation to justify its decision against the NSP's proposal mitigates against the use of benchmarks as described in the Rules. If so, then the AEMC needs to look not just at the benchmarking elements of the Rules but at the totality of the Rules so as to ensure that the Rules are not in conflict with one another so that benchmarking can serve the important roles that it is meant to.

Finally with respect to the evidence presented in Mountain and Littlechild (2010) and Mountain (2011), the AEMC noted the Energy Users Rule Change Committee "*attempted to rebut the claims that expenditure outcomes are attributable to rising demand, ageing assets and historic underinvestment*". The AEMC said that Mountain and Littlechild (2010) and Mountain (2011) set to "*rule out these factors*", which in the AEMC's assessment they have failed to "*conclusively*" do.

We suggest that the AEMC has mischaracterised their research. The evidence in both Mountain and Littlechild (2010) and Mountain (2011) recognises that rising demand and ageing assets are factors that in some cases have justified higher expenditure. But their point is that other factors (regulatory design, regulatory conduct and ownership) also explain higher expenditure. They have not sought to rule out rising demand, ageing assets or historic underinvestment as factors that may have justified higher expenditure in some cases, but rather have concluded that exogenous factors seem at least as, if no more, important as

these endogenous factors. It would be helpful for the AEMC to explain in what sense it thinks that this research "*has some merit*" and in what way the AEMC thinks it does not. This research is significant in terms of the concerns that energy users have about the existing regulatory design and the AEMC should take the trouble to assess it rigorously and transparently.

4.4 Statement of the problem and suggested solutions

Problem

We are concerned that the combination of the AER's proposals, the resulting Issues Paper submissions and the AEMC's Directions Paper has not clearly defined the problem and consequently the rationale for a solution, or the nature of the most appropriate solution.

The AER has said that the current rules unreasonably constrain it, but has not described clearly in what sense it is constrained. We also agree that the AER has not established clear evidence that it has been unreasonably constrained or of the efficiency detriments attributable to the purported constraints. The NSPs have argued, not unreasonably, that the AEMC could have done things differently if they chose to. The AEMC has generally sided with the NSPs but said it will look again at the evidence of a problem.

In our view, this debate has been misdirected and so misses the point. The nub of the problem, in our opinion, is not whether the AER is constrained by "reasonableness" requirements or whether it is limited to make the minimum changes needed to meet the objectives of the Rules, as the AER has argued. We agree with NSPs and the AEMC that neither of these two constraints, of themselves, unreasonably constrain the AER, as the AER suggest they do.

Rather, the nub of the problem, we suggest, is the requirement in the Rules that the AER has to justify its decisions with reference to the NSP's proposals. Under the Rules it is for the AER to prove to an NSP that the NSP's proposal is wrong, rather than for the NSP to prove to the AER that its proposal is right. This arrangement was established by the AEMC during the Review of Chapter 6 of the National Electricity Rules. At the time, the AEMC described this "propose-respond" model as "*purely a procedural mechanism … (that) is not intended to extend to the regulatory decision making criteria that apply to different elements of the overall regulatory model.*" [3]

However, as set out in Mountain (2011, page 51) the Australian Competition Tribunal (ACT) in an appeal by one of the distributors against an AER decision, provided a clear description of how the propose-respond model establishes the onus of proof. In particular, the ACT describe the operation of the proposed-respond model in the Rules as follows[4]:

1. Distributors must provide expenditure forecasts in accordance with the National Electricity Objective as described by the three criteria in the Rules;

2. The AER must accept the distributor's forecast if it is satisfied that the total of the forecast reasonably reflects the three criteria;

[3] AEMC, 2006. "*Draft Rule Determination, Draft National Electricity Amendment Rule 2006, July 2006*".

[4] Australian Competition Tribunal, 2009. "ACompT 8", paragraph 190.

3. It is not the AER's role to make a decision it considers best … the AER should be very slow to reject a distributor's proposal if it is backed by detailed, relevant independent expert advice because the AER, on an uninformed basis, takes a different view; and

4. The AER must not reject such a proposal merely because it has an expert opinion. The AER, based upon any expert advice, needs to make its own evaluation, an evaluation that is reviewable by the Tribunal.

It should be clear from this, that under the Rules the onus of proof lies with the AER to prove NSPs wrong. This arrangement, in our opinion, is more likely to deliver regulatory assessments of opex and capex allowances that are overly generous to NSPs. The AER and IPART has a similar view to us.

Our argument to support this view rests on a consideration of the information asymmetry between NSPs and the AER, and the implications of this for whether the AER's regulatory judgements are more likely to err in favour NSPs or their customers.

NSPs have an obvious information advantage relative to the regulator, since they own and/or operate the assets the revenues of which the AER regulates. This information asymmetry is well accepted in the academic literature and by regulatory practitioners. If the regulator's task is to assess an NSP's application as the ACT has described their task, then NSPs are in a position to use their proposals to the AER to lead the AER through its assessment in a way that limits the ability of the AER to disagree with it. By setting the regulators' task as one of followership (responding) to the NSP's application, rather than for the NSP to respond to the AER's proposals, the AER will be reacting, rather than pro-actively itself directing the investigation that it needs to undertake to make a regulatory determination.

In an environment of very significant expenditure, reasonably long forward expenditure projections (5 year price/revenue controls) and significant technological complexity neither the regulator nor the NSP can know for certain what the efficient level of future expenditure might be. Ex-ante estimates of future efficient expenditure whether made by the NSP or the AER will almost certainly be wrong: if the efficient level of future expenditure was known it would not be necessary to develop incentives to encourage it to be revealed. The regulatory design issue, therefore is whether the unknown error will more likely than not be in favour of the NSP or of its customers. If the "forecast" error is symmetrically distributed (i.e. the AER is as likely to over-estimate efficient expenditure as under-estimate it) then the regulatory design may be considered acceptable. If it is asymmetrically distributed (more likely to be too little or too much) then this would suggest a problem.

We suggest that the information asymmetry in favour of NSPs combined with a regulatory arrangement where the NSP proposes and the AER responds to the NSP's proposal (and is required to prove the NSP wrong) will mean that the error will invariably be asymmetrically distributed in favour of NSPs (i.e. expenditure allowances will be too generous). In other words, putting the onus of proof on the AER to prove the NSP wrong is more likely to result in regulatory allowances that favour NSPs rather than consumers. This is because, in delving into an NSP's expenditure claim in any area, the AER's informational disadvantage relative to NSPs will predispose it to deliver judgements that favour the NSP.

The problem is compounded by the arrangements for merits review, where individual AER decisions are subject to review by the Australian Competition Tribunal. The NSPs have argued that this arrangement delivers accurate and rigorous outcomes since they, not the regulator knows their business best, and also because the threat of merits review will encourage the regulator to undertake a rigorous assessment of their claims. The alternative

view, and the one we suggest is more reflective of actual outcomes, is that the AER will invariably be in a weaker position to prove the NSP wrong than the NSP is to prove that it is right and so the merits review arrangements simply worsen the AER's position.

In summary, considering the onus of proof established in the Rules and taking account of the incentives on NSPs to propose higher expenditure than needed, the information asymmetry in favour of NSPs, and the arrangements for merits review we conclude that regulatory assessments will invariably, and unreasonably, in favour of NSPs rather than consumers.

Finally, we would also like to draw attention to an additional, procedural but significant problem with the onus of proof. This confers on NSPs the ability to feed the information to the AER, to the NSP's benefit. This can be seen in the problem of NSPs making submissions on their proposals and making last-minute submissions to the regulator. If the AER is required to justify its decision against the NSP's proposals, this allows NSPs to strategically use the proposal and information provision process to its advantage and to the detriment of proper and transparent consultation.

If the AER is not required to justify its decision against an NSP's proposals, NSPs will no longer have an incentive (or ability) to game the regulatory process. To the contrary, they will have every incentive to comply with the regulator's requests as soon as they can. We return to this issue in our submission on regulatory process.

Solution

We strongly support the AER's proposal that it not be required to justify its determination of opex and capex allowances with reference only to the NSP's proposals. The AER should be free to determine the allowances without being required to justify variations from the NSP's proposals. This correctly re-establishes the onus on the NSPs to justify their proposals to the regulator rather than the other way around.

5 Capex incentives

This section responds to the issues that are described and reviewed in Chapter 4 of the Directions Paper.

5.1 Stakeholders' statement of the problem

AER

The AER says that the efficiency incentives in the current regulatory design are too weak. This applies whether or not forecast or actual depreciation is used. The core element of their proposal in this area is only to include 60% of any capex overspend into the regulatory asset base.

In addition, the AER wants:

- discretion to use actual or forecast depreciation in establishing the closing regulated asset base;
- to include capex re-openers and contingent project arrangements for the regulation of distributors' capex;
- to exclude related party margins in setting capex and opex allowances both ex-ante and through ex-post reviews; and
- discretion to change existing incentives or introduce new ones.

NSPs

The NSPs do not think there is a major incentive design problem, although they seem to prefer constant efficiency incentives for each year during a regulatory control period, rather than the existing ones whose power steadily declines over the period.

NSP think that the AER's analysis of the power of incentives is flawed because NSPs do not know what the allowed future rates of return are, and hence analysis based on the difference between future actual and allowed rates of return is invalid.

NSPs seem to agree that the AER should have discretion to decide between actual and forecast depreciation and they seem to agree that there is an issue with related party margins. However they disagree with the AER on all other points and disagree with the solutions that the AER has proposed in all areas.

Retailer, consumer and government views

Consumer representatives agree that capex efficiency incentives are too weak. They generally suggested though that more work needed to be done to assess whether the AER's 60% roll-in proposal was the best solution. On the subsidiary incentive design issues:

- Some consumer representatives suggested that forecast or actual depreciation should be locked in rather than discretionary, others took the opposite view;
- Retailers and consumers were generally not supportive of proposals to allow capex-reopeners and contingent projects in distribution regulation;
- The Victorian Government's Department of Primary Industries pointed to ossified incentive designs but did not say whether they supported the AER's proposal to design incentives outside the Rules.

5.2 AEMC's directions

The AEMC does not seem to be convinced that there is a serious capex incentive problem. It suggested that incentive design should not have regard to any difference between the allowed rate of the return and NSPs' actual cost of capital, and that having ignored this possible difference, the existing incentives do not encourage NSPs to overspend. The AEMC does however seem to be concerned about the declining power of the incentive over the regulatory period and suggests that this create a risk of "sub-optimal" timing of capex from an engineering point of view. The AEMC also seems concerned about the lack of supervision of overspend, although it seems much less concerned that there is a problem if NSPs spend up to their allowance.

The AEMC disagrees with the AER's 60% proposal because it says that it does not provide continuous incentives over the regulatory period, would be common to all NSPs and would exclude overspends from the RAB even if such overspend was purported to be efficient. A more general concern is that the AEMC thinks that prescribing an incentive scheme in the Rules would create a barrier to the implementation of other schemes "through negotiation".

The AEMC seems to favour an approach to incentive design in which broad criteria are stated in the Rules and the AER is then left to design the incentive, such as for example the Efficiency Benefit Sharing Scheme that applies to opex.

On other incentive design issues, the AEMC:

- seems open to further consideration of the merits of ex-post optimisation;
- has no firm view on actual or forecast depreciation;
- thinks that re-opener and contingent projects should be extended to distribution;
- is undecided on the treatment of related party margins; and
- does not think the AER should be empowered to develop incentive schemes outside of those already provided for in the Rules, other than as minor "pilot" schemes.

5.3 Our comments on the AEMC's directions

We disagree with the AEMC's analysis of the problem. We suggest their approach:

1. is inconsistent with accepted regulatory theory;
2. ignores the evidence of significant capex overspend; and
3. fails to properly account for differences in the cost of capital between privately-owned and government-owned NSPs.

On the first of these three criticisms, the AEMC suggests that the design of capex efficiency incentives should ignore any difference in the actual cost of capital of an NSP and their allowed rate of return. This is a remarkable suggestion. It is well established that the power of capex incentives (i.e the shareholders' proportion of the benefit attributable to expenditure reductions) depends on several factors including the year in which the saving is made, the asset life and the difference between the allowed rate of return and NSPs actual cost of capital.

This is clearly set out in the AER's proposal to the AEMC. It was also covered in detail in the AER's submission to the AEMC in 2005 as part of the Chapter 6 review, during which the AER commissioned monte-carlo modelling of different incentive designs to determine their

power as a function of different asset lives, year in the regulatory control period and difference between actual and allowed rates of return.

This issue seems to not be well understood by the AEMC. If an NSP has a lower cost of capital than the regulator thinks it has (and has allowed it in setting its prices) then the NSP will trade-off the disbenefit of losing the return (and possibly also depreciation) on any overspend during a regulatory control period, against the benefit of a higher return than it requires for the rest of the life of the asset. In this way, NSPs may prefer to spend more than they are allowed to during the regulatory control period because this maximises their profitability.

It is obvious from this that the NSPs' actual cost of capital is a critically important variable in making judgements about the power (and hence effectiveness) of regulatory incentives applied to its capital expenditure. It is theoretically unsound to do as the AEMC has done, and simply ignore this in making a judgement on the effectiveness of the existing capex efficiency incentives.

Even the Energy Networks Association accepts that the difference between the allowed rate of return and actual cost of capital is a significant variable in assessing the power of the capex incentives. However the ENA then tries to undermine the AER's proposal saying that since they do not know the allowed rate of return in future regulatory decisions, NSPs will simply assume that it will equal their actual cost of capital. This is obviously flawed: if the actual cost of capital is different to the allowed rate of return during the regulatory control period, on what basis would they automatically assume that in subsequent regulatory control periods it will be equal to their actual cost of capital (whatever this may be)? It is far more likely that NSPs will develop analyses and projections of what the future may hold and reflect this in their evaluation of incentives. Indeed the wealth of speculation on this by utility equity analysts is testament to exactly this.

On our second criticism (ignoring the evidence of significant capex overspend), Mountain (2011) and the AER's proposal sets out the evidence of a systemic problem of capex overspend against regulatory allowances by government-owned distribution network service providers in Tasmania, Queensland and New South Wales. These overspends were achieved under regulatory controls established by jurisdictional regulators. The incentives applying to capex spending in these controls were the same, or very similar, to the controls established in the Rules.

Further evidence of overspend by government-owned NSPs can be found in the outcomes delivered by government-owned transmission network service providers regulated by the ACCC and then the AER since 1999, which is also covered in the AER's proposal.

The AEMC has concluded that the existing capex incentives are appropriate but appears to have ignored the evidence of significant and persistent overspend by government-owned NSPs. Evidently the AEMC is either unconvinced of this evidence, (which we would find difficult to believe given its empirical basis) or it considers that the regulatory design is working, but the reasons for the overspend lie elsewhere (such as regulatory conduct – i.e. the AER set the wrong expenditure allowances in the first place; or governance i.e. government-owned NSPs have poor expenditure control).

Perhaps to varying degrees the outcomes are a combination of each of the three factors (design, conduct and governance). However, from our perspective this does not diminish the central importance of regulatory design (of which incentive design is a key element), since it plays such a significant role in determining whether consumers or shareholders bear the consequence of design, conduct or governance failures.

With respect to our third criticism (failing to account for the differences in the cost of capital between government and privately owned NSPs) the AEMC has assumed that the cost of capital for government and privately owned NSPs is the same. Or perhaps to be more precise, by virtue of ignoring the difference between the actual cost of capital and the allowed rates of return in its assessment of the effectiveness of the incentive, the AEMC suggests that none of the blame for the overspend can be attached to the fact that government-owned NSPs have a lower cost of capital than privately owned NSPs.

We suggest that it is extremely likely, if not certain, that government owned NSPs have a lower cost of capital than privately owned NSPs. There are several reasons for this including:

- That State governments collect the tax on the profits of their NSPs and so their after-tax returns are higher (by the corporate tax rates) than the returns achieved by privately owned NSPs (even the Independent Pricing and Administrative Tribunal of New South Wales accepted this in their submission on the AEMC's issues paper).
- State governments collect fees on the debt they provide to their NSPs. State governments that own NSPs are currently able to borrow money at around 4.5% and based on their own admissions lend this money to their NSPs at more than 7%). Privately owned NSPs are not able to borrow money at the same price as State governments, but under the Rules both privately and government-owned NSPs are allowed the same return on debt and hence the same cost of capital.

These issues are discussed in greater depth in the EURCC's proposal and in their response to the AEMC's Directions Paper and we refer the AEMC to that submission.

Finally, we disagree with the AEMC's conclusion that capex efficiency incentives that have a constant power for each year of the regulatory control period are necessarily preferable to incentives whose power declines over the regulatory period. The use of constant-power incentives for opex (through the Efficiency Benefit Sharing Scheme) is intended to deal with a regulatory gaming problem: since the regulator places a high reliance on the opex in the last year of the regulatory control period to set the opex for the next years of the coming regulatory period, NSPs have an incentive to "game" the incentive by deferring expenditure to the last year of the control. If they have a constant-powered efficiency incentive they have less reason to do this. (This is not an issue that affects capex -where the actual expenditure in any year of the regulatory period has little value as a predictor of the efficient level of capex in the coming regulatory period).

Furthermore, the AEMC's analysis of this issue (constant powered capex incentives) appears to ignore the well known issues of information asymmetry and economic incentives. The AEMC says that declining incentive creates the "*risk of sub-optimal timing of capex since capex that may be required from an engineering point of view may be delayed. These incentives may also create a risk of the sub-optimal use of inputs*". This ignores the opportunity an NSP has to substitute expenditure, to seek out innovative ways to meet its reliability objectives, to negotiate with its customers about deferring augmentations, to encourage embedded generation or demand-side reductions and so on? How can we be sure, as the AEMC suggests, that varying incentive power will risk "sub-optimal timing of capex" or "sub-optimal use of inputs". Moreover, since NSPs in Australia have been exposed to declining powered capex incentives since 1999 (and earlier in some cases), the AEMC might be expected to point to this evidence to substantiate its concerns. But it has not done so.

It seems to us that the key issue in considering declining incentive power over the regulatory period (for capex), but constant powered incentives (for opex) is that this may encourage NSPs to inefficiently substitute between the two, in order to maximise its rewards, but for no useful purpose to consumers. This is the relevant issue and the one that the AEMC should examine. Remarkably, the AEMC suggests it has no intention of examining this in this review, because the AER did not raise it as an issue.

Our comments on the AEMC's analysis of the other, subsidiary, incentive design issues is set out in the rest of this sub-section:

Ex-post optimisation

The AEMC entertains the prospect of some form of ex-post optimisation and has suggested that an ex-post review might exclude projects that had been the subject of some sort of regulatory investment test. We are not convinced about this. Simply because a project has passed an ex-ante regulatory test is no guarantee that the resulting costs were efficiently incurred. For example, in the only regulatory example of ex-post optimisation by the ACCC (or AER), in the 2004 revenue cap decision for TrandGrid, the ACCC decided to exclude around $30m of the expenditure that TransGrid incurred on the MetroGrid project, from the regulated asset base. That project had passed the Regulatory Test, although the final cost of the project was well over twice the cost of the project when it had passed the test. Under the AEMC's proposal, such a project (and the resulting overspend) would not be subject to ex-post optimisation and consumers would have paid higher transmission prices as a consequence.

Re-openers and contingent projects

The AEMC has suggested that provision for capex re-openers and contingent projects that exist for transmission should also apply to distribution network service providers. While the AEMC has noted Professor Littlechild's advice that lower expenditure risks should be reflected in lower rates of return, the AEMC does not appear to have made any commitment to the implementation of this. We suggest that the AEMC should ensure that its approach to changes in the regulatory incentives on capex is reflected in changes to the allowed rates of return.

In addition, there is no evidence that the AEMC has considered the impact on consumers or other stakeholders on the introduction of the various intra-period adjustments that it is proposing to introduce. Such intra-period adjustments have the potential to place even further demands on consumer organisations, and their ability to contribute to regulatory debates. Their ability to effectively represent consumer interests will be even further strained if it is to be extended not just to major price control decisions every five years, but also to intra-period adjustments. Considering the importance that the AEMC has placed on more active consumer representation in regulatory processes, this issue merits consideration as part of the evaluation of intra-period adjustment schemes.

Related party margins

We agree with the AEMC's assessment that NSPs should be free to contract with whomever they choose to, and that the regulatory regime should not affect their contracting decisions or choice of service providers. The relevant issue, as the AEMC has concluded and with which we agree, is the charges that consumers are required to bear. The AEMC, while rejecting the AER's proposals, has not provided guidance on how it intends to deal with the opportunity for service providers to inflate their costs on account of related party margins.

AER's discretion to develop other incentive schemes

The AEMC has suggested that the AER should have limited discretion to develop other incentive schemes, and that this should be achieved through the use of small-scale pilot schemes. We suggest that this merits further consideration. The effectiveness or not of an incentive is unlikely to be established if the scale is small, or the targets and incentive power diminished by the AEMC's desire to constrain the AER's discretion. Providing the regulator with discretion is not, *ipso facto*, a 'bad' thing. For example, regulatory discretion can be used in ways that sharpen the regulatory incentives, promote more innovation that benefits consumers or economic efficiency, or allow more flexible and timely responses to changing circumstances. What is more important is that the use of discretion is balanced and predictable. The AEMC has failed to recognise this and in the process could be preventing such benefits from being realised.

5.4 Our statement of the problem and our suggestions on solutions

It should be clear from the previous sub-section that we think there is a serious incentive design problem and that the problem is most acute in respect of government-owned NSPs whose cost of capital is likely to be significantly below the allowed rates of return.

We think the solution lies in strengthening the power of the incentive for NSPs to reduce their expenditure from the levels determined in the regulatory decisions. As such we support the thrust of the AER's proposal although we suggest significant further examination of this is warranted. We also suggest that incentives might be differentiated between government and privately owned NSPs in order to account for the difference in their respective cost of capital. Our suggestions on the other subsidiary design issues are set out in the rest of this section.

Forecast or actual depreciation

It is not clear to us why this is an issue. If the problem is insufficiently powerful capex efficiency incentives (as we suggest it is) then there should be a preference for the use of depreciation based on forecast, not actual, capex. We note the submission by the Victorian Government's Department of Primary Industry, which has expressed a preference for depreciation based on actual expenditure in Victoria (where NSPs have consistently spent below their regulatory allowances). However this argument ignores that possibility that the reason why Victorian NSPs have spent below their allowances (to the benefit of Victorian consumers and the NSPs) might be that they have had an incentive to do this, and the use of actual depreciation would diminish this incentive possibly to the detriment of NSPs and consumers.

Ex-post optimisation

We have some sympathy with the arguments presented by the AER against ex-post optimisation (evidentiary burden and investment certainty). However, we also note Professor Littlechild's comment on the use of ex-post optimisation in North America. Certainly the evidence, as presented by Ofgem in its fifth distribution price control decision, is that North American network service providers compare favourably internationally. It merits further detailed assessment whether ex-post optimisation accounts for this in part. We also suggest that there be further detailed analysis of the one instance – TransGrid's MetroGrid project - where the ACCC/AER has implemented ex-post optimisation. What were the evidentiary burdens in this decision, what was the process for decision-making and to what extent did this ex-post optimisation affect TransGrid's subsequent investment decisions.?

Re-openers and contingent projects

We suggest that the case for greater intra-period flexibility has yet to be made. The AEMC's argument that NSPs have to provide services on demand (unlike the circumstance in contestable markets) is unconvincing. Networks are engineered with substantial redundancy and options invariably exist to defer augmentation or to develop demand-side or supply-side alternatives – the mobile gensets in Queensland being a case in point. United Energy's 'summer peak pricing' being another and Transgrid's use of demand

Greater flexibility in the determination of expenditure allowances needs to also take account of consequently lower equity risks, and higher consultation and regulatory process demands. These elements of the issue need to be taken into account in the evaluation of changes.

Related party margins

We agree with the AEMC that what matters is the price that consumers are charged, not whom the NSP contracts with. We also note the inconsistency between the AER's aversion to ex-post optimisation and its willingness to apply ex-post optimisation to deal with related party margins. Solutions that involve the use of benchmarks might be explored in greater detail in this area as a way to avoid intrusive contract evaluation by regulators.

6 Rate of return frameworks

This section responds to the question of the appropriate rate of return frameworks that are described and reviewed in Chapter 5 of the Directions Paper.

6.1 Stakeholders statement of the problem

AER

The AER has proposed that the rate of return be determined by it, for electricity and gas distribution and transmission through reviews that it will undertake at least every five years. These reviews will not be subject to merits review. The AER suggests that this will resolve the shortfalls in the current arrangements, which include:

- The ability for DNSPs (in Chapter 6) to determine individual rate of return parameters during each review means that the AER is precluded from assessment of overall reasonableness;
- The ability of DNSPs (in Chapter 6) to cherry-pick WACC parameters during each review; and
- That the persuasive evidence test (in Chapter 6) is problematic to interpret.

NSPs

The NSPs disagree with the AER. They consider that the arrangements in Chapter 6 have worked well, although there have been problems attributable to the inflexbility of the quinquennial WACC reviews in Chapter 12.

Consumers, other regulators and state governments

Consumer representatives, the Economic Regulation Authority of Western Australia and the Department of Primary Industries in the Victorian Government generally support the AER.

6.2 AEMC's directions

The AEMC has generally disagreed with the AER, and agreed with the NSPs. The AEMC said:

- The quinquennial review arrangement applicable to TNSPs in Chapter 6A is too inflexible;
- It is not convinced by the AER's argument that there has been cherry-picking of WACC parameters by NSPs; and
- It is not convinced that persuasive evidence is a concern as the AER suggests it is.

6.3 Comment on the AEMC's directions and our suggestions on possible solutions

This is a complex area, but our general view is that the AEMC has dismissed the AER's concerns too lightly.

Firstly on the issue of "cherry-picking", the AEMC has dismissed the AER's concern that NSPs have attempted to use price control decisions as opportunities to re-open and perpetually review WACC parameters to their benefit. Instead the AEMC seems to defend the NSP's attempt to re-open WACC parameters as a noble defence of their right to ensure that "*the rate of return that the AER ultimately decides upon is at least sufficient to ensure that it can attract the funds in the financial markets to undertake investments in its network over its regulatory period*".

We suggest that this is at best naïve and at worst deceptive. NSPs have a very strong incentive to make every effort to achieve as high a rate of return as they can. A review of the many pages of submissions and argument during each NSP price and revenue control decision is evidence of the great attention that this area attracts. To characterise this attention as the pursuit of the right answer, as the AEMC seems to, is simply wrong.

The flexibility established in Chapter 6 has means that DNSPs have attempted to re-open consideration of several parameters that have been debated many times and considered exhaustively in recent regulatory decisions. This has consumed resources often for little purpose other than to fend off unreasonable rent seeking from the NSPs. It is not reasonable to point to the significance of the rate of return for NSPs revenues and profitability – as the AEMC does - as justification for the perpetual review of cost of capital parameters as allowed under Chapter 6.

On the issue of inflexibility, the AEMC points to the ACT's decision on gamma and that the Chapter 6A arrangement prevents the implementation of the ACT's decision for TNSPs until the next WACC review. We are not convinced that this is *necessarily* the problem that the AEMC suggests it is. Specifically, the National Electricity Law establishes the ACT as responsible for reviewing the merit of AER decisions. We dispute however that this means that the ACT's decisions are necessarily right and the AER's necessarily wrong (whether or not it rules in the AER's favour).

Most of the significant WACC issues that the ACT has reviewed have required the exercise of judgement on issues that are highly arguable, such as the calculation of the Debt Risk Premium, Gamma and the averaging period for the risk free rates. We have reviewed their decisions and generally disagree with their judgements in most of these decisions. Characterising the ACT's decisions as correcting "errors" in the AER's decisions is unjustified. The ACT's decisions in most significant respects involve the exercise of judgement, on which there are differing views. It follows from this that we do not support the AEMC's claim that Chapter 6A is inflexible because it prevents these ACT "error corrections" from being reflected in future AER decisions.

In fact, it is quite possible that 'better' outcomes would have been achieved without the involvement of the ACT. In other words, it is at least arguable that the involvement of the ACT has delivered worse outcomes. As the AEMC has raised this matter, we strongly urge them to not just assume that the ACT will, as a mater of course, deliver improved outcomes from the perspective of the regulatory objectives. The AEMC should take a deeper perspective on the ACT's involvement in regulation. For example, has the AEMC considered:

- The incentives that the merits review process places on the NSP and the regulator. These incentives are not just what the NSPs claim them to be but are far more complex and interwoven.
- The lack of consumer involvement in ACT process, bearing in mind the professed support of the AEMC for greater consumer involvement. Very few cases before the ACT have involved consumer intervenors and no consumers have ever appealed to the ACT. The barriers to entry for consumers are simply too high.
- A detailed assessment of past ACT cases in terms of the objectives of economic regulation, and the national electricity and gas objectives.
- That the AER's WACC reviews allow for a combination of public and transparent assessments, consultation with all stakeholders and involvement by consumers to a far greater extent than any ACT decision.

In summary, we do not agree with the logic underlying the AEMC's dismissal of the AER's concerns. However we are also not convinced that the AER has proposed an appropriate solution.

We suggest much more work needs to be done to find the appropriate way forward in this area. So far, there has been no consideration, by the AEMC, of the impact of changes on the rate of return framework on consumers and their ability to contribute to WACC decisions. The perpetual review that Chapter 6 has engendered has played to the NSP's advantage to the extent that such perpetual reviews have placed even greater strain on consumer's ability to contribute to price review decisions.

The AEMC's discussion has also not encompassed Professor Littlechild's recommendation that changes to the arrangements for the determination of capex (and specifically the AEMC's proposal to allow intra-period capex adjustments) should be reflected in allowed rates of return. More generally we would like to see this issue raised as part of a systematic analysis of the compensation for the risks borne by NSPs under the system of regulation. In fact, as mentioned above consumers have played no part in these ACT decisions and the Tribunal has therefore not heard from them, notwithstanding that the ACT's decisions on the risk free rate and the gamma have involved providing the NSP's concerned with almost $2.6 billion in additional revenue.

The arrangements for the determination of the rate of return are very significant for consumers. They are also very complex and would benefit from a wider and far more holistic contemplation than the AEMC has so far embraced. Trade-offs need to be found between flexibility, predictability, consumer involvement, fair compensation for risks and efficiency incentives. We strongly encourage the AEMC to extend the terms of reference of the involvement of Professors Littlechild and Yarrow to also include rate of return issues. We suggest that the AEMC's consideration in this area would benefit greatly from their considerable experience in this area.

Finally, we would like to strongly encourage the AEMC to establish evidence of how the allowed rates of return that have been established under Chapters 6 and 6A and the National Gas Rules compare to the allowed rates of return in decisions by other regulators in Australia and internationally. Such empirical comparison will, we suggest, be very useful in assessing the need for reforms of these aspects of the regulatory framework.

7 Cost of debt

This section responds to the AEMC's directions on the return on debt described and reviewed in Chapter 6 of the Directions Paper.

7.1 Stakeholders' statement of the problem

AER

The AER pointed to several problems with the calculation of return on debt. They suggested that the specification of the return on debt should be excluded from the Rules and should instead be included in the determination of the WACC that the AER would periodically undertake.

EURCC

The EURCC suggested that calculation of the return on debt as specified in the Rules was flawed, and that the actual cost of debt to government and privately owned NSPs was significantly below their allowed return on debt. They also suggested that there is a big difference in the cost of debt of government and privately owned NSPs. The EURCC concluded that the Competition Principles Agreement did not justify government-owned NSPs receiving the same return on debt as privately owned NSPs.

On the basis of the calculation of the effective return that jurisdictional governments receive from their NSPs, the RCC proposed that the return on debt for government-owned NSPs should be set with regard to the cost of debt raised by the jurisdictional government treasuries. For NSPs that are privately owned, the EURCC proposed a formulation of the return on debt based on the trailing average yield to maturity of corporate bonds issued in Australia.

NSPs

The NSPs agreed with the AER and the EURCC that there is a problem with the specification of the return on debt. However they disagreed with the AER's proposal that the AER should be allowed to set the return on debt. They also disagreed with the EURCC that the Competition Principles Agreement did not support government-owned NSPs receiving the same return on debt as privately owned NSPs. While many NSPs recognised that the actual cost of debt was below the allowed return on debt, they attributed this to the shorter tenure of debt issued since the GFC. Most NSPs and their representative organisations gave guarded support for the rolling average calculation proposed by the EURCC.

Consumers, retailers and governments

Large consumer representatives and several large consumers supported the EURCC's proposals. Many of the small consumer representatives did not express a view on the EURCC's proposals but did support the AER being allowed to determine the return on debt. The Queensland Treasury Corporation suggested that the EURCC had overstated the difference between the cost of debt and the allowed return on debt, and the QTC and New South Wales Treasury suggested that the EURCC had overstated the profitability of NSPs to their jurisdictional governments owners. Both Treasury Corporations staunchly defended the rights of the NSPs they own to receive the same return on debt as the privately-owned NSPs. The South Australian Government did not support government-owned NSPs receiving

a lower return on debt than their privately owned peers, while the Department of Primary Industries in the Government of Victoria supported some aspects of the RCC's proposals.

7.2 AEMC's directions

The AEMC has agreed that there is a problem with the specification of return on debt in the rules. However they seem undecided as to whether the actual cost of debt is below the allowed return on debt, or to be more precise the AEMC holds open the possibility that if the actual cost of debt is lower than the allowed return on debt then the gains on this for NSPs may be offset by higher refinancing risk associated with shorter term debt that has been raised since the GFC.

The AEMC has agreed with the AER to the extent that they suggest that the return on debt should not be specified in the Rules, but should rather be left to the AER to determine. However, as discussed in the previous section, they disagree with the AER's proposal that the AER's determination of the return on debt should not be subject to merits review.

The AEMC disagreed with the EURCC's proposal that the return on debt for government-owned NSPs should be different to the return on debt for privately owned NSPs. It gave six reasons for this:

1. It fails to recognise that competitive neutrality principles also apply to correct resource allocation distortions that can result in the input as well as output markets of government-owned monopoly businesses;
2. It does not recognise autonomy of state and territory governments to make policy decisions in compliance with the CPA to corporatise their NSPs and apply commercial disciplines;
3. It does not factor in the role of the debt neutrality fees as required under the CPA and the legitimate impact it has on the debt raising costs of government-owned NSPs;
4. It will potentially create artificial geographical market distortions in generation and network capacities across the NEM because (of) the pricing signals that would be created due to network ownership;
5. It could remove the option of any future sale or other divestiture of government-owned NSPs; and
6. It confuses the roles of shareholder and taxing authority arrangements of governments as owners of NSPs.

7.3 Comment on the AEMC's directions and suggestions on possible solutions

We disagree with the AEMC's conclusions in this area.

With regard firstly to the response of the AEMC to the AER's proposals, the AEMC has not provided a justification for its thinking that the return on debt should not be specified in the Rules. Specifying the calculation of the return on debt has potential to reduce disputes during price control decisions and provide greater certainty to the industry and its consumers. It may also reduce the need for on-going consumer advocacy during each price/revenue control decision, thus helping to ensure the best use of scarce consumer advocacy resources. The cost of debt is amenable to observation and we can see no compelling reason why the formulation for its calculation should not be specified in the Rules.

With regard to the EURCC's proposals, we are concerned that the AEMC has failed to address the Committee's essential proposition: that the treatment of the return on debt

should be evaluated against the National Electricity Objective having regard to the extraordinary profitability of the NSPs to their jurisdictional government owners.

We noted that the AEMC's consultant, SFG, dismissed the Committee's analysis of the profitability of NSPs in New South Wales. This dismissal was based on the New South Wales Government's submission to the Issues Paper, not on SFG's own analysis. We have noted that the EURCC's evaluation of this aspect of the New South Wales submission concluded that their dismissal of the EURCC's analysis could not be sustained. The EURCC's reasoning to support this conclusion was submitted to the AEMC on the 17th of February 2012.

With regard to the AEMC's six reasons for dismissing the EURCC's proposals, we suggest that none of these reasons withstand critical scrutiny. We are particularly concerned that the AEMC has failed to have regard to its obligations under the National Electricity Law in its dismissal of the EURCC's proposals in this area. We refer the AEMC to the detailed analysis of this in the EURCC's submission on the Directions Paper.

We call on the AEMC to reconsider its position in relation to the treatment of the return on debt for government-owned NSPs. Whether or not any premium to the underlying cost of debt should be reflected in the allowed return on debt for government NSPs merits further objective assessment.

8 Regulatory process issues

This section responds to the regulatory process and confidential information issues that are described and reviewed in Chapter 7 of the Directions Paper.

8.1 Stakeholders' statement of the problem

AER

The AER has complained that NSPs are providing late submissions and are making submissions on their own proposals. The AER suggests that through this they are able to frustrate due process for the review of information by the AER and other interested parties.

The AER is also concerned that NSPs are abusing the opportunity to claim confidentiality and through this, is frustrating transparent disclosure.

NSPs

The NSPs say that they should be able to provide the most up-to-date information to minimise the prospect of errors by the AER. They also say that there is nothing untoward with their claims of confidentiality.

Others

Other stakeholders, according to the AEMC, generally agree with the AER on both the regulatory process and confidentiality issues.

8.2 AEMC's directions

The AEMC has concluded the current process has not worked and that this is attributable to a much greater volume of information than the AEMC had expected. It suggests that greater dialogue (both formal and informal) between the NSP and the AER in the lead up to the AER's draft decision would improve things. The AEMC is not inclined to support the AER's proposals to restrict NSPs from submitting information to the AER, but will consider five possible options ranging from a new step in the consultation process to restricting the scope of NSP submissions on its own proposals.

On confidentiality, the AEMC is not convinced that there is a problem. It considers that it has sufficient powers under the NEL and common law to use its discretion in determining the weight to be given to confidential information, but the AEMC intends to examine how this works in practice.

8.3 Comment on the AEMC's directions and our suggestions on possible solutions

We think this is a straight-forward problem to resolve. We disagree with the AEMC's diagnosis and their proposed approach to a solution.

It seems to us, that the problem here is that the onus of proof lies with the AER to justify its decision against the proposal put to it by the NSPs. As such, whenever an NSP provides

information to the AER, the AER is obliged to consider it and ensure that any decision it (the AER) makes, can be justified with respect to the information provided by the NSP. This creates an obvious opportunity for NSPs to use the information provision process in a strategic way to control the amount of time the AER has to review proposals put to it by NSPs, and to frustrate proper consultation processes.

This problem is easily resolved by placing the onus of proof on NSPs to justify their proposals to the AER, rather than the AER to justify their decision against the NSP's proposal. This will correctly incentivise NSPs to provide information on-time and the AER will easily be able to control aberrant behaviour by NSPs (or other stakeholders) by providing advance notice of its intention not to have regard to late submissions. As such, restrictions on NSPs such as the AER has proposed are unnecessary.

On confidential information, if the burden of proof is correctly established, NSPs will have much weaker incentives to attempt to hide information through confidentiality claims. If the onus is on the NSP to convince the regulator, they would presumably wish to make as much information as possible openly available, to convince the regulator of the merits of their proposals. Hiding information through confidentiality claims will undermine the credibility of their proposals to all stakeholders.

Hence, we believe that changing the burden of proof will help to ensure both the NSP's provide timely information to the AER and limit their confidentiality claims.

Finally the AEMC's suggestion that the AER consult more frequently with NSPs (formally and informally) and/or that it could consider including additional steps in the regulatory process seems to us to be unnecessary. To our knowledge the AER already consults frequently and extensively with NSPs before and during a regulatory process. Additional steps could only increase the regulatory burden on all parties, including consumers. This will serve to remove consumers even more from regulatory decisions, which would become even more the domain of NSPs and the AER.