

19 August 2010

Mr Chris Pattas
General Manager
Network Regulation South
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001



Dear Chris,

AER Draft Determination on Victorian electricity distribution prices for the period 2011-2015 and distributors' revised proposals

The Energy Users Association of Australia (EUAA) welcomes the opportunity to participate in this important review and provide a submission to the Australian Energy Regulator (AER) on its Draft Determination on the Victorian DNSP's regulatory proposals for the period 2011-2015 and the revised proposals of the distributors.

Having assessed the AER's Draft Determination and the distributors' revised proposals in detail, we are satisfied that the Draft Determination provides a robust and thorough approach that deserves the support of energy users. It has the EUAA's support. Confirmation of the AER's Draft Determination in a Final Determination will provide strong and timely evidence that the regulatory process in the National Electricity Market can deliver robust outcomes to end users that reflect the National Electricity Objective. It will also benefit Victorian energy users and the state economy.

We urge the AER to fully consider the views of energy users in finalizing its review.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Roman Domanski", with a stylized flourish at the end.

Roman Domanski
Executive Director



Submission to the Australian Energy Regulator on its Draft Decision on the Revenue and Price Proposals by the Victorian Electricity Distributors for the Period 2011-2015

August 2010

Acknowledgement & Disclaimer

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The views expressed in this document are those of the EUAA and do not necessarily reflect the views of the Consumer Advocacy Panel or the Australian Energy Market Commission.

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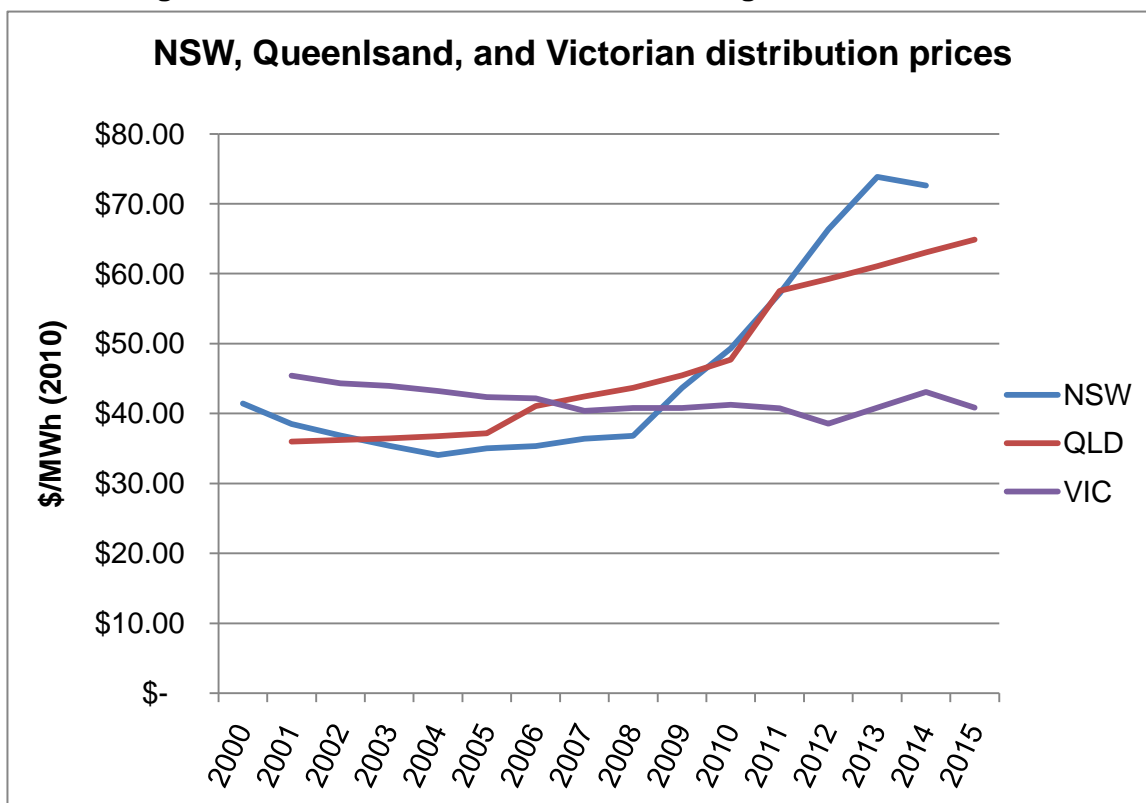
Executive Summary

In this submission we set out the Energy Users Association of Australia’s (EUAA) views on the AER’s draft decision on the electricity distribution network price proposals from the Victorian electricity Distribution Network Service Providers (DNSP’s), Citipower, Powercor, Jemena, SP AusNet, and United Energy, for the period 2011-2015 and the distributors’ revised proposals. The EUAA has over 100 members, many of whom are large electricity users in Victoria and their operations will be significantly impacted by the outcome of this review. Electricity distribution charges make up close to half of their electricity costs and are also important to their reliability and quality of supply.

The Victorian distributors have proposed significant revenue and price increases of between 30 and 56 per cent in real terms, compounded to 2015, in order to fund large increases in their capital and operating expenditures. They claim that these increases are necessary in order to upgrade, replace and maintain their distribution networks.

The AER has determined that these revenues and prices do not reflect efficient costs and instead determined that the revenues and average prices in Victoria should follow a trajectory to 2015 resulting in both being 7 per cent lower in real terms than their 2010 levels. This is in sharp contrast to the increases allowed by the AER in New South Wales (NSW) and Queensland (Qld), with the resulting price impacts for all three States shown in Figure E 1.

Figure E 1: Distribution Network Price Changes due to AER Decisions



We support the AER’s decision not to allow the expenditure increases proposed by the business, which would result in the same high cost and inefficient networks in Victoria as exist in NSW and Qld. The AER proposes to reduce the capex allowances for the five distributors by 38% in real terms, by applying a so called “Revealed Cost” approach which draws upon the

Victorian DNSP's historical expenditures from 2001 to 2008. We welcome the principles behind this analysis which is consistent with the regulatory framework. However, we do not accept that the AER has completely discharged its regulatory obligations under the National Electricity Rules since it has failed to apply benchmarking to its assessment of capex and opex.

A key aspect of the AER's assessment of the Victorian DNSP's proposals is their rejection of their energy forecasts. We support the AER's assessment based on the following: the Victorian distributors have an incentive to understate energy consumption forecasts as this allows them to increase their revenue and prices; their past track record at forecasting has been inferior to the regulator (compared to actual outcomes); energy forecasts in their original and revised proposals are well below the trend growth in energy consumption in Victoria; and they base this on the impact of a range of energy saving policies, even though similar past policies have had not such impact and there is doubt about the forecasts upon which the policies are based.

The proposals from the DNSP's emphasize the aging of their networks and the need to spend significant amounts to maintain power supply reliability and quality. We accept that some expenditure is needed to replace aging assets but cannot support increases of the magnitudes proposed. We note that the AER's proposed allowances for replacement capex will still result in a 20 per cent increase above current period levels. The lower levels allowed by the AER are consistent with historical performance by these businesses who have demonstrated their efficiency by maintaining an absolute lead in reliability levels across Australia, whilst still managing to underspend the capital expenditure allowances approved by the Essential Services Commission over the years 2001 to 2008. As Figure E1 shows, this has been done with moderately falling network prices since 2001.

In the case of operating expenditures, whilst proposing a reduction of 18 per cent in real terms which we support, the AER has not even reproduced the regression analysis it performed in its recent Queensland and South Australians distribution determinations in order to provide an indication of the relative position of each distributor in the NEM. It instead simply repeated their base-year escalation approach, a method whose validity was never established, and which is never mentioned in the National Electricity Rules.

We note the existence of strong evidence to suggest that the Weighted Average Cost of Capital (WACC), or rate of return, as determined by the AER is still too high. Our submission argues that the cost of debt component of the WACC is not reflective of the true cost of borrowing experienced by the Victorian distributors, or any electricity network in Australia. We present comprehensive arguments to support our case in a paper attached to this submission, which explains this issue is a function of the prescriptive National Electricity Rules and the way the AER chooses to apply them. The Rules limit the benchmark cost of debt to being reflective of a narrow range of domestic debt instruments, while the DNSP's in fact raise debt through a wider range of domestic and international debt instruments. This results in a debt risk premium that is three times higher than it needs to be. Consequently, there is a windfall gain for the Victorian distributors that will cost Victorian electricity consumers more than \$0.5 Billion over the 5-year period. Distribution prices are around 7 per cent higher as a result.

We are disappointed that the AER has chosen to apply its Service Target Incentive Scheme without incorporating the quality of supply elements of the existing Victorian scheme. In particular, Victoria (as well as SA) has had a superior service target mechanism that also covers improvements in power quality. This seems to us to result in inferior outcomes for energy users through national regulation.

We note that electricity related recommendations stemming from the final report of the Victorian Bushfire Royal Commission (VBRC) could impact on the capex and opex of the distributors, especially any requirement to underground cables in bushfire prone areas. This could be very expensive and impact significantly on energy users in the distribution areas of Powercor and SP Ausnet to the extent that they are forced to pay for these costs. First principles suggest that the costs should be borne by the beneficiaries such as those directly affected and (to some extent) the broader Victorian community, not electricity users. Any Victorian Government decisions involving VBRC related expenditure proposals by the distributors will need to be rigorously assessed by the AER to ensure they involve efficient approaches and costs. Such proposals should also be subject to proper consultation including with energy users. If such proposals emerge prior to finalisation of this determination, they should nevertheless be considered via proper consultation.

The revised proposals from the Victorian distributors argue that the AER has exceeded its regulatory authority in its Draft Determination and also that they have been treated inequitably compared to the AER's recent determinations for NSW and Qld distribution. In our view, the AER has more correctly applied the National Electricity Rules, the National Electricity Objective and the intent of incentive based network regulation to this Draft Determination than it did in either NSW or Qld. In regard to the distributors' complaint about inequitable treatment, we cannot agree with their proposition, which would amount to supporting a past approach that was an incorrect application of the law.

Confirmation by the AER of its Draft Determination in its Final Determination will provide outcomes that ensure efficient provision of network services in Victoria, that these efficiency benefits are shared with end users and that the regulatory outcomes are similar to what users would experience if the market for network services were able to be provided competitively.

Overall, whilst it contains some important shortcomings for users, we welcome the AER's Victorian distribution Draft Decision. It is important that the AER now confirm this decision in its Final Determination due in October. We note that the decision is a significant improvement on the AER's other recent network regulatory decisions, particularly those in NSW and Queensland, which supported high cost and inefficient network businesses, and are resulting in very hefty electricity price increases that are burdening energy users in those States and will hinder the State economies. The AER has an important opportunity to redress this situation in its Final Determination on Victorian electricity distribution and ensure that Victorian electricity users and the State economy do not suffer under the same burdens. Such an outcome would give energy users renewed hope that the AER can be a strong and independent regulator as expected by end users at the time of its formation in 2005.

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1. Introduction

The Energy Users Association of Australia (EUAA) welcomes the opportunity to provide a submission to the Australian Energy Regulator (AER) on its draft determination for its review of the Victorian electricity distribution network service providers' (DNSPs) prices for the period 2011 to 2016. The EUAA and its members value the fact that the AER is involved as the national energy regulator in scrutinising the proposals of the DNSPs – who all enjoy the privilege of being monopoly providers – and that it uses a public review process that provides for participation by end users.

The EUAA is a non-profit organization that represents the interests of its members on a range of energy policy and regulatory matters, including AER reviews. We have over 100 members, including many of the largest electricity users in Australia and Victoria. Taken together, our members account for a significant share of the electricity consumed in Victoria. Electricity distribution costs would generally comprise more than 40 per cent of our members' delivered cost of electricity. Those users also depend on distribution services to deliver a reliable supply of electricity with high power quality levels to their sites. They therefore have a strong interest in this review and in the outcomes determined by the AER.

1.1. What energy users need from the AER review

Our members desire to see an outcome from this review which provides them with network prices that are reasonable and reflect only the efficient costs borne by the DNSPs over the next five years. They also desire to see a continuation of reliable supply of electricity to their premises. We note that these objectives are consistent with the outcomes expected from confirmation and implementation of the AER's draft determination. In making these points, we would like to add that EUAA members welcome the fact that Victoria's privately-owned electricity distribution businesses have demonstrated over the past decade that they are relatively well run and efficient, as well as being providers of a consistently reliable service that is the best in the country. The businesses themselves and the regulatory regime in which they operate have played major parts in this. Victorian electricity consumers and the state economy have benefited as a result. It is important that the AER's Final Determination confirm its Draft Determination so that these joint outcomes – efficient costs, reasonable prices and consistently reliable service – continue over the next regulatory period.

1.2. Outcomes from other recent AER network pricing reviews

The outcomes to date and those that would emerge from confirmation of the AER's Draft Determination contrast to the disturbing situation in respect of electricity network businesses in other parts of the country, where expenditure has blown out of all proportion and network prices have risen dramatically as a consequence following recent AER reviews. In particular, capex costs sought by the businesses – and largely accepted by the AER in their recent reviews in NSW (2009) and Queensland (2010) – have typically doubled or tripled compared

to the previous regulatory period. Meanwhile, reliability levels promised by the network businesses concerned have not improved, and are not targeted to improve further as a result of the large expenditures they have sought and been permitted. In both NSW and Queensland, network reliability has historically been worse than in Victoria.

These developments are of major concern to energy users who can have little confidence that the costs allowed the businesses in these two States are efficient, especially when they are not benchmarked by the regulator even in the face of order of magnitude increases in their allowed costs. In fact, there is compelling evidence that the State Government-owned NSW distribution businesses are inefficient and exhibit high costs when compared to their counterparts in Victoria and (even more so) in Great Britain.¹ The situation with respect to Queensland would be similar following the AER’s 2010 distribution price review. Moreover, the gap in inefficiency and higher prices will grow significantly in the years between now and end of the first half of this decade. The charts below show this for distribution prices and capital expenditure.

Figure 1: Average distribution prices across NSW, Qld and Victoria from 2000 to 2015

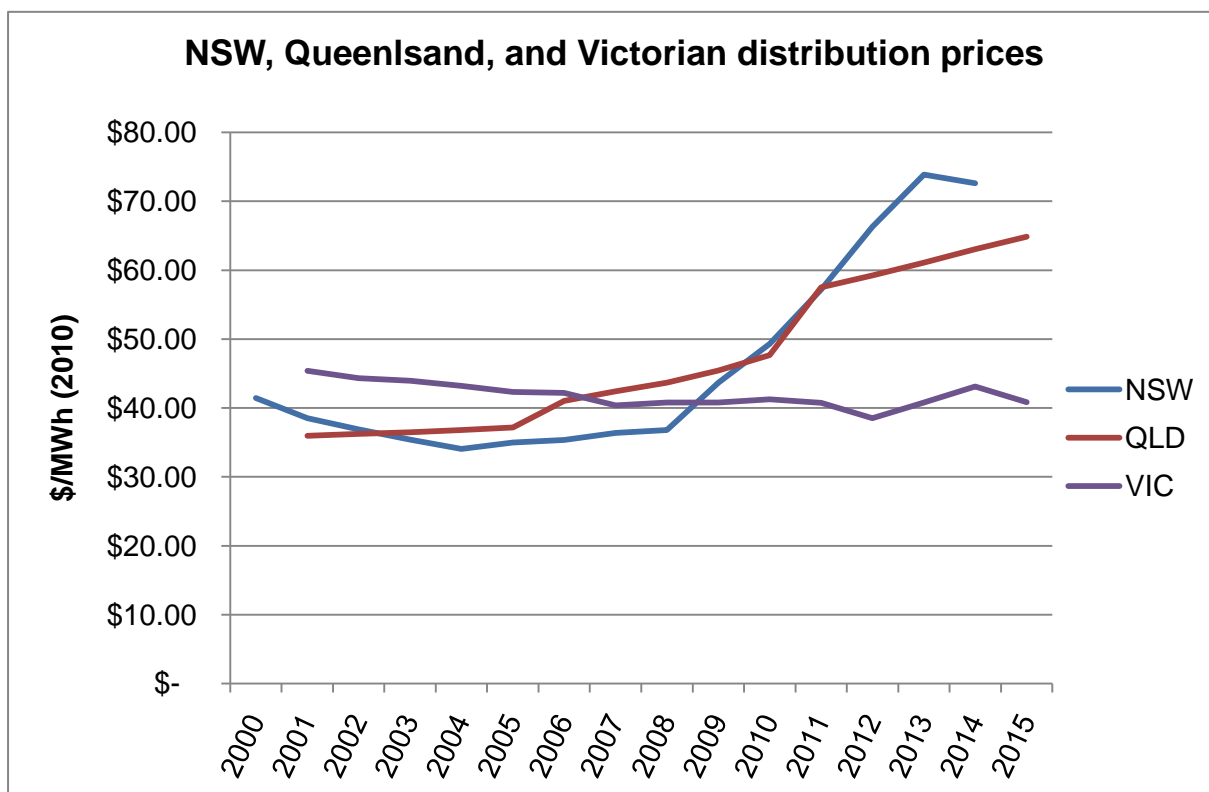
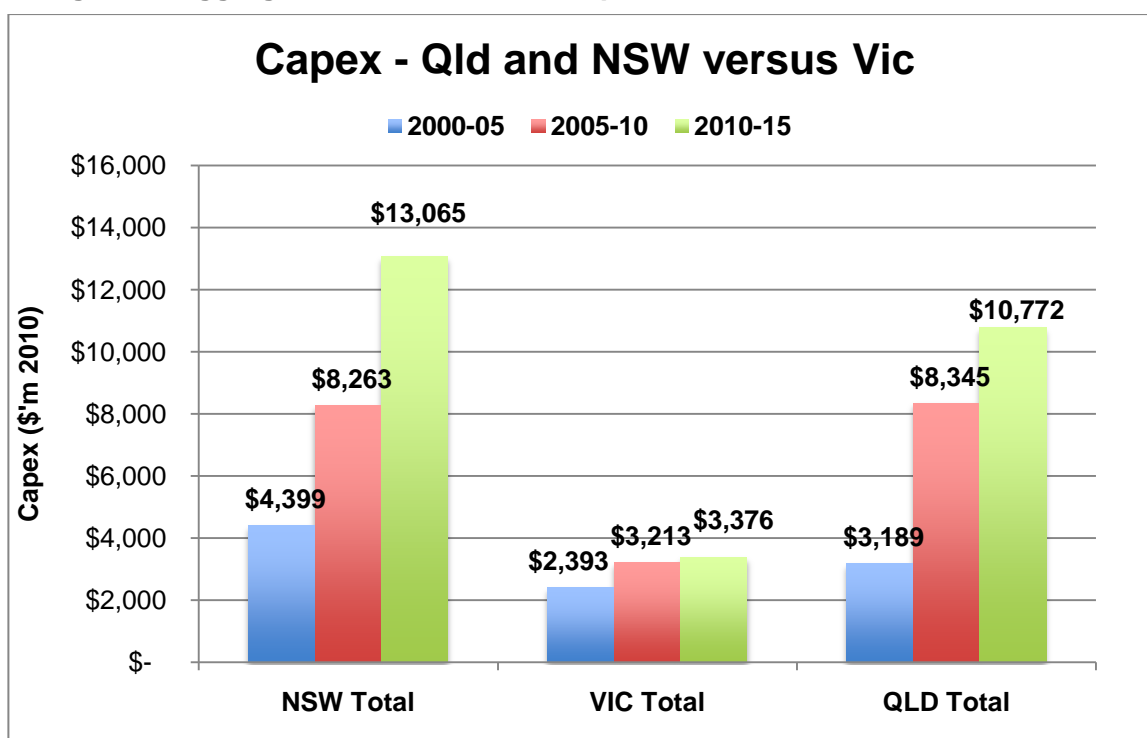


Figure 1 demonstrates the glaring network price disparity that will emerge between Victoria on the one hand and New South Wales and Queensland on the other over the next five years. This reflects the continuing efficiency of the Victorian distributors and the growing inefficiency of those in NSW and Qld. It was definitely not the intent of the electricity deregulation process and the incentive approach to network regulation applied as one of its core elements.

¹ B. Mountain and S. Littlechild, “Comparing electricity distribution network revenues and costs in New South Wales, Great Britain and Victoria”, *Energy Policy*, Elsevier, June 2010.

In Figure 2 we show one of the main drivers for these price differences, the extraordinary capital expenditure increases in NSW and Queensland. Over the years from 2000 to 2015 capex will have virtually doubled from one five year regulatory period to the next. By contrast, over the past two regulatory periods in Victoria there have been far more reasonable increases in capex, without any real diminution in service. The AER's Draft Determination would see a continuation of this over the next five years.

Figure 2: Aggregate increases in real capex for NSW, Vic & QLD and DNSP's ²



1.3. How large electricity price increases affect the economy

Outcomes such as those in NSW and Qld are having a deleterious impact on energy users and economies in the states concerned. The impacts include:

- End user electricity prices obviously go up significantly as the network price increases are large and directly affect around half of the total electricity bill for households and businesses.
- Businesses find it difficult to budget for such large increases, especially when they come in the form of regulated charges, which most electricity users would assume

² These show historical actual expenditures for the periods 2000-2005 and 2006-2010. However, in QLD and NSW over those two periods the DNSP had in aggregate overspent their allowances in each period by around 25%. Over the same periods the Victorian DNSP's had collectively *underspent* their allowances by 22% in the first and are forecasting a 5% underspend for the second period. The Victorian situation is in line with the intent of the regulatory design.

have some consistency, predictability and certainty about them. The recent large annual network price increases in NSW and Queensland have come as an unexpected shock.

- Households and their budgets would be similarly affected.
- Operating costs for businesses will therefore also increase unexpectedly, especially for those firms that use significant amounts of electricity. Unless they can pass on these increases, the higher electricity costs will force firms to reduce other costs or cut back their operations.
- Firms (existing or new investors) will consider the higher electricity costs when making decisions about employing people, whether to invest, where to invest and whether to keep facilities open if they are expected to become unprofitable.
- Firms that cannot absorb the higher electricity prices will have to pass them on. As they do so, the prices of other goods and services will increase.
- It is unlikely that firms competing in export markets or against imports will be able to pass on all of the electricity price increases – and many of these are energy intensive manufacturing or mining operations and located in regional centres – so that they will lose some of their competitive edge. Their business could well suffer a loss of sales or its viability even become threatened.
- The higher cost of electricity and its ripple-through effects on the prices of other goods and services will increase retail and supermarket prices, and will place upward pressure on inflation. For a good as pervasive as electricity, it is inevitable that network price increases as large as those in NSW and Queensland will have an impact on inflation. Businesses and households will find it harder to make ends meet.

This is the sort of scenario that is now playing out in NSW and will emerge in Queensland over the next 12 months as network price increases work their way through the state economies. We are already seeing the impacts on NSW consumers with complaints to the NSW Energy Ombudsman about rising electricity prices having increased dramatically over the past 12 months as the impacts of the AER's 2009 decision on network prices took effect.³ In business, there are continuing expressions of concern about the negative impacts of the large network price increases and evidence that some large electricity users are considering cost and network exposure reduction options such as bypassing the distribution network to avoid its high costs and inefficiencies. Given the growing inefficiencies now build-in to the NSW network businesses, this type of outcome is also not an optimal use of resources.

Meanwhile, electricity price increases have affected the rate of inflation. In NSW, the network price increases of 2009 have been the by far the largest contributor to the Sydney annual electricity price increase of 22 per cent, which was the largest contributor to the annual Sydney CPI increase of 2.9 per cent. Without this, the CPI would only have increased by 2.6 per cent, and would have been the lowest in the nation.

Unfortunately, the EUAA sees very little evidence to date that consideration of effects such as those highlighted above has impacted on the actions of the State Governments concerned and

³ Clare Petrie, NSW Energy and Water Ombudsman, *Sydney Morning Herald*, 17th Nov 2009

the AER. There is also an emerging concern that they appear to carry no weight in the regulatory framework for energy networks, which seems to be carried out in more-or-less a vacuum relative to impacts on the rest of the economy. Given the magnitude of the network price increases and high network costs now being experienced in NSW and Qld, it is time this changed. The AER has an opportunity to demonstrate its understanding of the importance of these broader impacts by confirming the key elements from its Draft Determination.

1.4. Consultation and engagement with energy users

Noting our comments at the outset of this submission that we welcome the opportunity the AER's processes afford for consultation and submissions by energy users, we raise below a number of points related to consultation and engagement with electricity consumers as part of AER regulatory determinations, including this one, both by the AER and by the Victorian distributors.

1.4.1. By the AER

The EUAA has a concern that the regulatory processes undertaken by the AER are increasingly complex and detailed. This has two undesirable impacts.

First, it appears to be at odds with a fundamental basis of incentive regulation, that is, the obvious information asymmetry of the regulator *vis-à-vis* the regulated business is best overcome by avoiding some of the detail and relying instead on powerful incentives being put in place by the regulator for the business to be efficient. This problem is now manifest in the AER's recent decisions on NSW, Qld and SA. Whilst we appreciate that the AER is required to apply the relevant parts of the National Electricity Rules in regulating network businesses and that these now bind the regulator to an undesirable extent, nevertheless, even within the Rules there are ways in which the AER can still pursue worthwhile elements of incentive regulation, as its Draft Determination on Victorian distribution shows. Doing so also promotes greater confidence on the part of end users that regulatory decisions are well founded and promoting the National Electricity Objective and the fundamental objectives of incentive-based regulation.

Second, the complexity and detail of the regulatory process applied by the AER acts as a disincentive for electricity consumers to engage and become involved. Often they do not have the resources to do so. We note that a similar point has been raised by the Hon Peter Batchelor, Victorian Minister for Energy in a submission to the AER in which he said⁴:

⁴ "Submission on the Victorian Electricity Distribution Network Service Providers' regulatory proposals for 2011-2015", the Hon P. Batchelor, Minister for Energy and Resources, Government of Victoria.

“...However, the AER must be mindful that the ability for interested stakeholders, particularly those representing customers’ interests, to make informed submissions is limited by the size of the regulatory proposals.

I am concerned that there has been a lack of effective consultation with stakeholders representing customer interests to date, and ask the AER to redress this issue as soon as possible.”

As consumers bear the responsibility for network prices and are receivers of these services they have a significant stake in the AER’s decisions. It is also worth pointing out that the AER’s regulatory decisions have tended to abstract from their pricing outcomes – although we note and welcome some greater attention to this in the Victorian Draft Determination – even though this is one of the most fundamental aspects of such decisions for end users.

It would be worthwhile for the AER to consider this point in the context of finalizing the Victorian electricity distribution review and also more broadly in terms of its regulatory processes. The EUAA would certainly welcome a consideration of this by the AER in terms of how involvement by consumers can be both increased and improved and would welcome an opportunity to participate in a consideration of this. In raising this matter, we also draw the attention of the AER to a paper delivered at the ACCC 2009 Regulatory Conference by Prof Stephen Littlechild⁵, who was the foundation electricity regulator in Britain, which canvassed ways to develop greater consumer engagement in regulatory processes.

1.4.2. By the distributors

Direct consultation by the distributors with consumers as part of any regulatory review is also important. The main ways that this currently takes place is through the notification of new tariffs which only comes after the end of the AER’s formal review and is rather truncated and offers limited scope for any meaningful changes (ie it is essentially ‘one-way’). This partly stems from the ‘arms length’ approach to tariff setting that has been part of the regulatory approach.

However, the large increases in network charges resulting from recent AER reviews in NSW, Qld, SA and Tas have exposed shortcomings in this approach. Energy users have been taken by surprise by the extent of the price increases and received very little notice of them (in the case of some new tariffs in NSW in 2009 as little as 2 weeks) and with some significant rebalancing of tariffs meaning that the effected users experienced tariff changes far higher than the norm. This played havoc with the budgets of electricity consumers. We believe there is a strong case for this part of the regulatory process to be reviewed and reformed to take account of these issues.

The AER did previously respond to similar concerns raised by energy users in its previous reviews by its then Chair writing to the CEO’s of the network businesses concerned and

⁵ “Substitutes & complements for traditional economic regulation of monopoly infrastructure”, Stephen Littlechild, Tenth ACCC Regulatory Conference, Gold Coast, Qld 30-31 July 2009

asking them to improve their consultation with users on tariff changes and begin this process earlier. As a result, the network businesses did undertake some additional consultation. However, we are aware of no consultation having been undertaken to date by the Victorian distributors and we would urge the AER to bring this matter to the attention of the businesses. Notwithstanding that the average network price changes that would emerge if the AER's Draft Determination is confirmed, we believe that energy users would still welcome advance warning of indicative changes and consultation on this before it is too late.

We also note that there has been little consultation with energy users by the Victorian distributors on their proposals, the Draft Determination and their revised proposals. The limited participation by the distributors at the AER's Pre-Determination Conference (PDC) was also a disappointment. The only distributor that has consulted with the EUAA is United Energy as we welcome their approach. At the PDC we called on the distributors to engage more with energy users during the remainder of the AER's review but they have not responded positively to this, which disappoints us.

2. The AER's application of the regulatory framework and use of revealed cost

This Draft Decision is the first decision by the AER where it has clearly valued the historic performance of the distributors in assessing efficient expenditure allowances for the coming regulatory period. The distributors have rejected this on two main grounds:

- That this is inequitable – they argue that the Victorian distributors are being treated more harshly than the government-owned distributors in other States. This argument has been expressed in the distributors' revised proposals as one of "consistency" of regulatory decision-making. However, the real issue is not consistency – the distributors are making a claim based on perceived comparative fairness.
- The second objection that the distributors have raised is that the AER has no right to look to the past in assessing future expenditure claims. Again, this objection has not been expressed directly, but rather it has been couched in the jargon that the AER has failed to implement the "propose and respond" regulatory model.

We disagree strongly with both of these arguments and the rest of this section sets this out.

2.1. Inequitable treatment

We find it hard to differ with the distributors in their view that the AER has taken a tougher line with the Victorian distributors than it has with the government-owned distributors. The evidence for this, whether expressed as a difference in the distributors' proposals and the AER allowances, or differences in the absolute levels of opex and capex per customer is clear.

We think the AER's decisions on the allowed level of opex and capex for the Queensland and New South Wales distributors was badly wrong, and we set out our basis for this view in our submissions on those decisions. The equity argument of the Victorian distributors is therefore that the AER should perpetuate errors of the past. This is contrary to the intent of our regulatory regime, and so we suggest that the distributors' argument on these grounds should be rejected.

The distributors have also pointed to the relative efficiency of their businesses compared to those in other states of Australia. While hard evidence for this in the form of rigorous benchmarking does not yet exist, a comparison of expenditure levels and service outcomes generally supports this conclusion. We agree that reasonable weight should be placed on *relative* efficiency. However, distributors have an incentive to select the worst performing peers so that they appear to be relatively efficient. Comparing the Victorian distributors to

those in Britain suggests the historic performance of the Victorian distributors is considerably less impressive than it appears from a comparison with their Australian peers.⁶

2.2. The value of historic information

The AER has placed considerable value in what it has called the “revealed efficiency” of the distributors. This has found expression in a number of aspects of the draft decision on the efficient level of opex and capex. We note, however, that it is not really the revealed efficiency that the AER has observed – efficiency has not been quantified or determined. Rather, the concept of revealed efficiency has been used most directly in the opex determination (where the businesses are assumed to be efficient because they have regulatory incentives). The concept is also used more generally (i.e. in an unquantifiable way) in numerous areas where the AER places value on the observation that distributors have generally spent less than they claimed that they needed to spend. By inference, distributors are overstating their future claims.

The distributors’ response to the AER’s application of the revealed cost approach is firstly that cost efficiencies that have been delivered in the past are now exhausted, and secondly that the AER has no right to look to the past in assessing what the future might hold:

- With respect to exhausted cost efficiencies, it is to be expected as a matter of course that distributors would argue that efficiency gains are exhausted. But, there is no compelling evidence for this. Service quality and reliability standards have continued to rise, albeit progressively. If there was evidence that the businesses had been pushed to the limit, it might be that this would manifest in degrading service performance. Furthermore, we suggest that there is no sound reason to expect that the AER should have to define specifically *how* improved efficiency will be achieved in future. The AER should not be expected to predict developments that will deliver greater efficiency in future. It should be enough to observe that over time and across the economy, productivity rises in response to competitive rivalry. The AER’s task is to deliver the effects of competitive rivalry in the regulation of monopoly service providers. The default expectation should be that productivity gains in the distribution sector should at the very least match economy-wide trend rates of productivity improvement. This means reductions in real terms of the unit costs of delivered services. The default expectation is that expenditure should rise in real terms only if services are expanding, or if there is a measureable improvement in the quality of those services.
- With respect to the second argument that the AER has no right to look to the past in assessing future claims, it is absurd to expect that the AER should blind itself to distributors’ historic performance in their assessment of future expenditure claims. The analysis of historic outcomes provides important information about motives underlying the claims that the distributors have made to the AER. It also provides information about the errors that regulators may have made in assessing those claims. It is essential that the

⁶ See Mountain, B., Littlechild, S. “Comparing electricity distribution network revenues and costs in New South Wales, Great Britain and Victoria”, *Energy Policy*, pp 10-12, 2010.

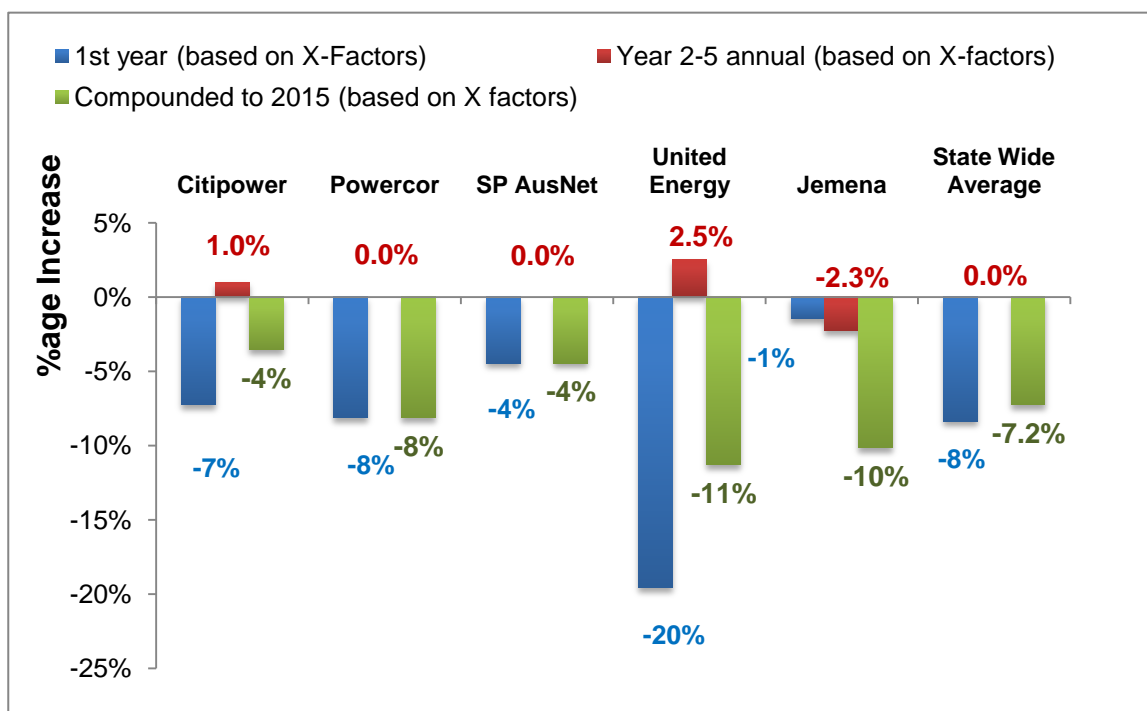
AER takes account of this information in understanding the incentives underlying the businesses, and to ensure that historic regulatory errors are not repeated. To be specific, it is entirely reasonable for the AER to be sceptical about the claims that the distributors make on their future expenditure requirements, particularly when they have made similar claims in the past, and have demonstrated an ability to manage their expenditure below those initial claims. The AER would also be aware that the distributors have an incentive to put their future requirements in such a way as to give them an advantageous outcome from the regulatory process.

3. Price and Revenue impacts

The impact of the AER’s determination on network prices is a key area of interest for energy users.

The Draft Decision by the AER on the Victorian distributors has the beneficial impacts for end users of *reducing* average distribution prices across Victoria by 7 per cent in real terms over the next regulatory period. These are broken out for each of the five DNSP’s in Victoria in Figure 3, which also shows the first year price change, and the average annual price change from 2012-2015.

Figure 3: Real distribution price changes for the 5 Victorian DNSP’s from 2011-15

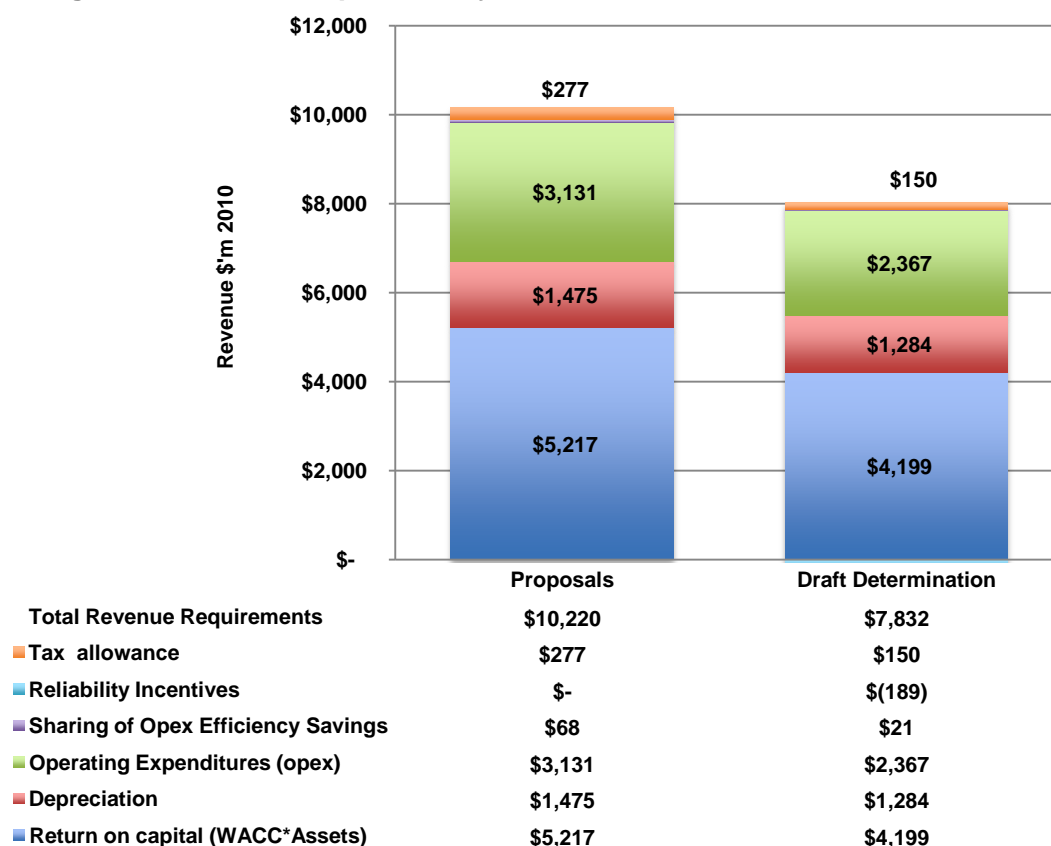


The price reductions in Victoria contrast to the increases of 50 per cent and 90 per cent that will be experienced by NSW and Qld users over the current 5-year regulatory period.

The differential that will exist between NSW and Victorian network prices by 2015 is going to be at least \$30/MWh, which is roughly equivalent to nearly a \$30/tonne carbon price, a level which would cause government serious problems in attempting to enact an emissions trading scheme or carbon tax. The resultant competitive disadvantage from network price increase does not attract any compensation for trade exposed industries, unlike a CPRS related electricity price change would have. Hence, the impact on our most exposed industries is absolute.

The AER's Victorian Draft Decision would result in a 22 per cent reduction in real revenues and is shown in Figure 4, which also shows the make-up of the Victorian businesses' proposed revenue allowance and the impacts of the AER's draft decision. The latter takes into account their expenditure reductions and WACC decision. Note the prominent place of return on capital being around 50 per cent of the total revenue and therefore total price. This is a combined effect of the capital intensity of network businesses and the high rate of return, or weighted average cost of capital (WACC), proposed by the AER.

Figure 4: The make-up of the 5-year revenue allowances for Victorian DNSPs



Thus the capex, due to its being rolled forward into the Regulatory Asset Base (RAB) for the lifetime of the assets, in combination with the WACC, has the largest impact on revenue (and in turn end user prices), and are therefore key areas of concern for users.

4. Growth forecasts

The network prices seen by the end-users are a combination of revenue reductions and the AER's assessment of the energy growth forecasts submitted by the DNSP's, who have an incentive to understate their future energy growth as this would result in higher network prices and thus higher revenues than needed.

In our submission on the DNSPs regulatory proposals, we pointed out that there has been a historical trend of under forecasting energy consumption in Victoria and that the actual energy consumption was higher than forecast. The AER notes in its Draft Decision that under-forecasting energy consumption allows for higher prices to be charged resulting in increased revenues under the Weighted Average Price Cap regulatory regime.

Figure 5 compares the energy consumption forecasts over the previous regulatory periods and the next regulatory period. It shows that the energy forecasts allowed by the Office of the Regulator General (ORG) in the 2001-2005 regulatory period and the Electricity Services Commission Victoria (ESCV) in the current period were significantly closer to the actual energy consumption than those proposed by the distributors. The energy forecasts allowed by the regulators that were, on average, around 1 per cent less than actuals, whereas the distributors' were 2 per cent less than actuals. These differences are significant in the context of the impact that they would have on the allowed revenues. For example, every 1 percent difference in energy forecasts, when taken over the last regulatory period would have resulted in an additional \$75m in revenue. Consequently the impact of accepting the revised proposal, if the regulators track record in energy forecast were to continue would be a windfall of around \$700m to the businesses over the coming five years, or approximately 8% more revenue.

Figure 5: Performance of DNSPs past energy sales forecasts

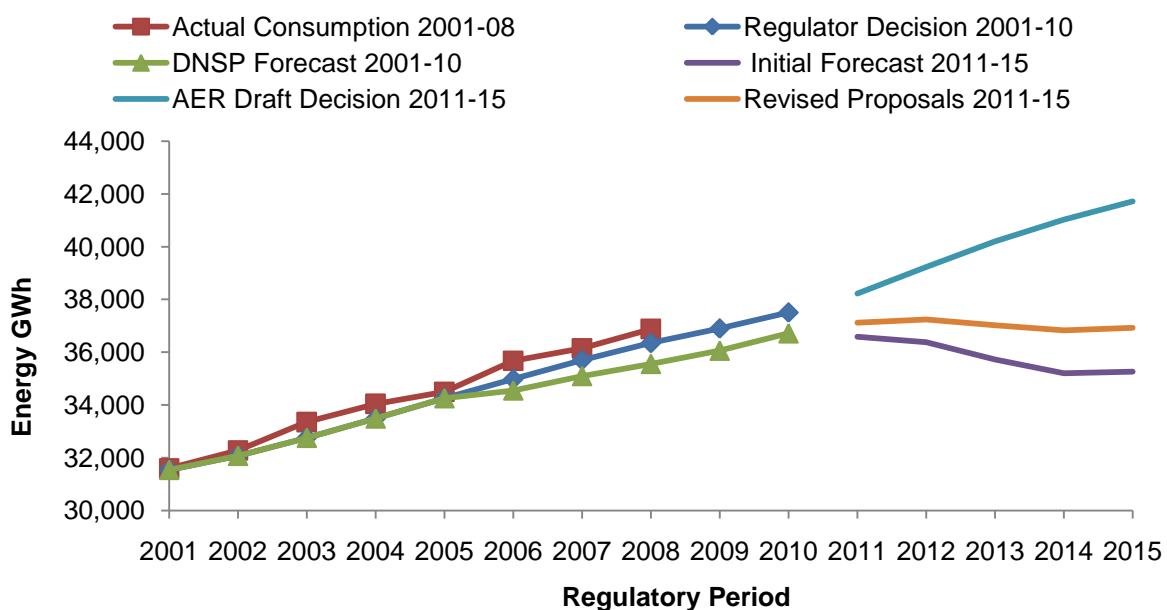


Figure 5 also shows that the forecasts of the DNSPs and the AER have diverged even more for the next regulatory period. This is a matter of concern to energy users. However, the regulator appears to have been much closer to the trend of past energy growth, the DNSPs could be seeking to even more dramatically under-state energy growth than they have in past regulatory reviews in the hope of using this to increase their revenue, even allowing for their revised proposals, where they have somewhat moderated their original position. We note that the AER position in their Draft Determination seems much more consistent with past trends whereas the DNSP's proposals and even their revised proposals differ significantly. We would urge the AER to take these points into account in their Final Determination.

One of the key reasons the DNSPs have used to justify their lower energy forecasts is the impacts of policy measures intended to dampen energy use. We expressed concerns in our submission on the Victorian DNSP's regulatory proposals that they had overstated the impact of policy measures designed to reduce energy consumption.⁷ The distributors asserted that these policies would reduce energy volumes transported through their distribution networks by approximately 4 per cent from 2008 levels over the next regulatory period. We provide some further commentary on the impacts of these policy measures below for consideration by the AER.

It is worthwhile considering these in the context of the past performance of related schemes. The Council of Australian Governments (COAG) established the National Framework for Energy Efficiency (NFEE) in 2004. This framework established minimum energy performance standards (MEPS) for appliances, the federal Energy Efficiency Opportunities (EEO) scheme and the mandatory disclosure of building energy performance. Stage 2 of the framework continued with the EEO, MEPS and a further five measures which included the expansion of the MEPS, a strategy to phase out incandescent lights, the Heating, Ventilating and Air-conditioning (HVAC) strategy, and the national water heating strategy. At the State level the Victorian Government has established the Environmental Resource Efficiency Plan (EREP) scheme and the Victorian Energy Efficiency Target (VEET) scheme. The MEPS, VEET and the EREP scheme have been operating since 1999, 2007 and 2008 respectively.

The Victorian DNSPs have assumed that the energy savings measures stated in Regulatory Impact Statements (RIS) for the schemes that they rely on to justify their energy forecasts, will deliver the savings modelled in those statements. It is important to note that while the RIS were prepared under the guidelines set by COAG, as Wilkenfeld has noted in assessing the schemes, "there is considerable latitude in interpretation, in modelling approaches and in the assumptions used by the respective models".⁸

In light of this, and the relatively early stages in the operation of these types of schemes, it is clear that there is still a great deal of doubt surrounding the impact of these policies on energy consumption in Victoria. We believe it would be imprudent for the AER to rely on these

⁷ Energy Users Association of Australia, *Submission to the AER on Victorian Electricity Distributors Regulatory Proposals for the Period 2010-2015*, p.9

⁸ George Wilkenfeld, *Prevention is Cheaper than Care - avoiding carbon emissions through Energy Efficiency*, January 2009, p. 11.

forecasts to set its allowed energy growth for the next regulatory period. As mentioned above, there are at least four reasons for this:

- Past experience shows that the regulator has been more accurate than the DNSPs at estimating future energy growth;
- Past policies to contain energy growth have not had any apparent impact on lowering the longer term rate of growth;
- The future policies relied on by the DNSPs to justify their lower energy forecasts for the next regulatory period are subject to considerable doubt based on the impact of similar past policies and the inherent uncertainty surrounding the modeling used to support the introduction of these policies; and
- The DNSPs have a well-known and powerful incentive to understate the future growth of energy.

Given the above and having examined the Draft Determination and the DNSPs' revised proposals, we welcome the AER's decision to reject the Victorian DNSPs forecasts of energy consumption and urge them to maintain this pragmatic stance.

5. Benchmarking of Capex and Opex

We note with disappointment that the AER has continued to rely on ‘top down’ benchmarking of both capex and opex in the draft decision.

On capex, the ratio analysis presented in Appendix I, interesting though it may be, does not in any way satisfy the AER’s specific requirements in relation to benchmarking in the Rules. The section discusses benchmarking as if it is some vague academic concept, and has attempted to pass-off the compilation of a series of random ratios as satisfying the benchmarking requirements under the Rules. This is not acceptable to energy users. It does not meet the minimum standards for benchmarking in economic regulation. It is most regrettable, and unconstructive, that the AER is attempting to argue that it is.

We have set out our understanding of the AER’s obligations on benchmarking in detail in our submission to the AER on the Queensland distribution decision. If the AER has a different view on its benchmarking obligations to the detailed analysis that we presented in that submission, we respectfully request that, in the Final Determination, the AER outlines its position with reference to the discussion in that submission.

On opex, we are most disappointed to see that the AER has not even attempted the limited regression analysis that it conducted in the decision for the Queensland distributors. Instead, the AER has hidden behind the assertion that the businesses can be relied upon to “reveal” their efficient expenditure.

We do not think this assertion has much merit. If it did, we might assume that the distributors were all equally efficient, because they all operate under the same incentive regime. Obviously this is not the case – which is precisely why the Rules specify a range of opex factors, including benchmarking, that the AER is expected to have regard to in deciding the efficient expenditure allowance.

Our view is that the AER has avoided its responsibilities by failing to benchmark opex as the Rules require it to. We respectfully request that the AER rectifies this in its Final Decision.

We observe that AER justified its failure to benchmark opex on the basis that it does not have the data to do this. Yet the AER managed to develop a regression analysis for both the Queensland and New South Wales decisions. Indeed, the AER vigorously defended what it had done in an appeal heard by the Australian Competition Tribunal⁹. If the AER had the data needed to perform their analysis of opex in these previous decisions, why suddenly does it not have the data to do this in the Victorian decision?

⁹ Application by EnergyAustralia and Others (includes corrigendum dated 1 December 2009) [2009] ACompT 8 (12 November 2009), <http://www.austlii.edu.au/au/cases/cth/ACompT/2009/8.html>

Finally, we wish to place on record our disagreement with the comparison that AER has previously drawn between Ofgem's ability to benchmark opex and the AER's failure to do so, as attributable to the fact that Ofgem had the data necessary to do this. We feel this is not factually correct. Ofgem has used benchmarking in its distribution decisions since 1999, and at that time had no better cost information available to it about the British distributors, than the AER does now about the Australian distributors.

We consider that the AER is using in an unjustified way the issue of data availability as justification for not undertaking its benchmarking obligations. Though the data may well be less complete than the AER would wish it to be, they should not use this as a valid reason to prevent the compilation and use of a benchmark. Similar data availability and analytical deficiencies arise in the "bottom-up" approach that the AER currently implements, and yet the AER does not use this as reason to dismiss these bottom-up analyses. We expect that the AER should at all time make best endeavours to implement all its obligations, rather than pick and choose amongst those obligations.

6. Capital expenditures

This section sets out the views of the EUAA on the AER's Draft Decision on the Victorian DNSP's allowed capital expenditures.

The five businesses proposed a significant amount of capex for the period 2011-2015 of \$5.4b (\$'2010), an increase of 66 per cent over the current period estimated expenditures. In its draft decision, the AER has not accepted the businesses proposed capex and has reduced the allowed capex to \$3.4b (\$'2010), a reduction of 38 per cent in real terms. In their assessment, the AER used a "revealed cost" approach as developed and applied by Nuttall Consulting.

In this section, we place the draft capex allowances in the context of the overall expenditures and allowed revenues for the Victorian DNSP's and note their importance to users. Following this we comment on the largest category making up the total allowed capex, which is the capital expenditure for maintaining reliability and quality of supply for the current system. This category is also referred to as replacement of aging assets or asset renewal.

6.1. AER Capex decision in context

As mentioned above, the AER has applied a reduction to the capex of around 38 per cent in real terms, which is a 5 per cent increase on the estimated actual capex for the 2006-2010 period. The reduction translates to around a 20 per cent reduction in the return-on-capital component of the revenue requirements with respect to the Victorian DNSP's proposals. The dollar impact is a reduction of around \$1billion in nominal terms over the 5-year regulatory period. The impacts of the AER's reduction are set out together with the past expenditures in Figure 6.

Reductions in capex are of particular interest to users as their impacts are not limited just to the upcoming 5-year period. The impacts of capital expenditures continue to impact prices over the lifetime of the assets, or around 20 to 50 years in typical regulatory terms, meaning the reduction proposed by the AER is of significant and ongoing benefit to users.

By applying the revealed cost approach, in combination with several layers of additional analysis, the AER was able to conclude that the DNSP's forecasts greatly overstated their true requirements. We note that capex accounts for around 58 per cent of the total expenditures that the businesses would be allowed under the AER's Draft Determination and welcome the approach taken by the AER in this draft decision in order to determine the efficient level of capex.

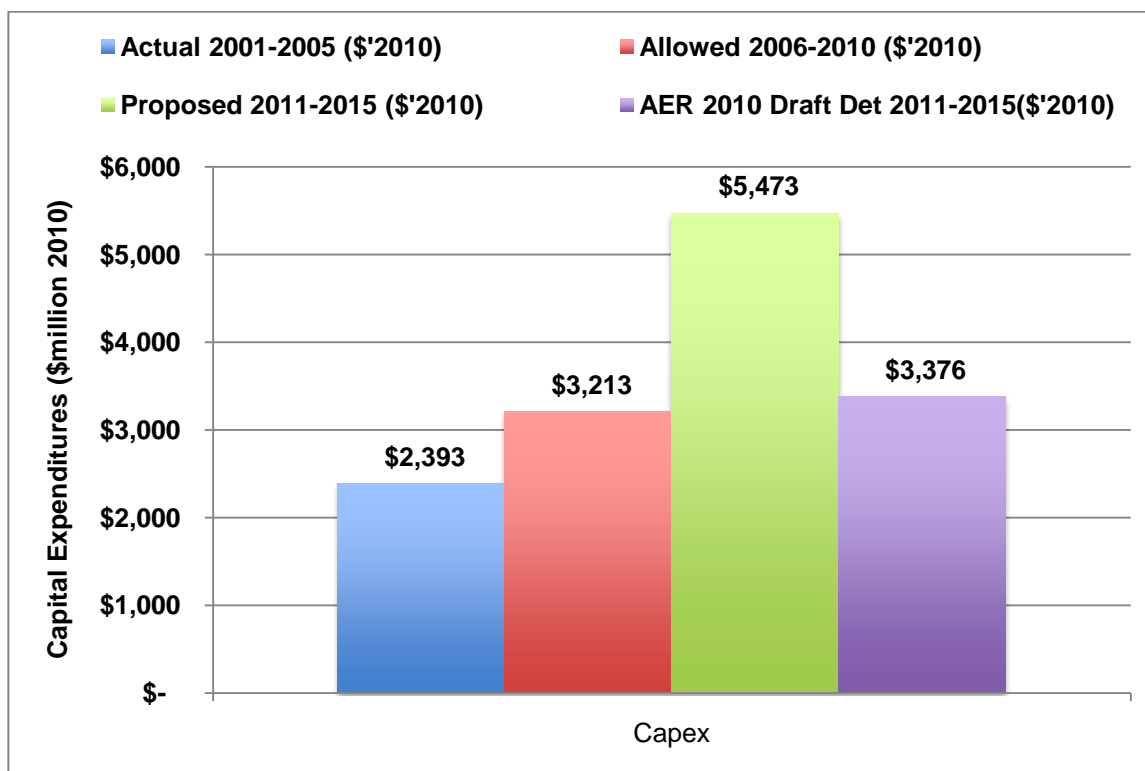
Criticisms have been levelled at the AER's revealed cost approach, particularly in the case of capex, both by the DNSP's themselves in their revised proposal, and by their consultants, e.g. NERA Economic Consulting for SP AusNet. We note that the approach relied on by the AER is not new. Indeed, it was well utilised in the regulatory regime in Victoria and was an explicit element of it. As an example of this, we note the following comment from the Essential Services Commission's 2006-2010 Electricity Distribution Price Review decision:

“ ...

However, in order to claim the efficiency carryover amounts, the distributors would be required to reveal the more efficient costs of providing the service and those revealed costs would then inform the Commission's assessment of the expenditure proposals for the 2006-10 regulatory period

...¹⁰
... ”

¹⁰ Essential Services Commission, *October 2005 Price Determination as amended in accordance with a decision of the Appeal Panel, Final Decision*, Volume 1: Statement of Purpose and Reasons, 17 February 2006

Figure 6: Victorian DNSPs' Aggregate Capex from 2001 to 2015

We note that this approach is a marked improvement on the recent NSW, Queensland, and South Australian reviews, where the AER relied on assessing in detail the distributors' proposals despite the inherent information asymmetries, resource imbalance and time constraints that the AER experiences vis-à-vis the regulated entities. It is vital for the regulator to use techniques that allow the incentives that the businesses face to transition towards efficient costs to be revealed.

The problem is not, as the businesses would maintain, that the AER has been inconsistent in its Victorian Draft Decision, with respect to its earlier decisions, but rather that it should have at least applied this approach to those decisions.

We note that in applying the revealed cost approach to determine the capital expenditures, the AER analysed the actual expenditures from 2001 to 2008 inclusive only. Their data appropriately did not include the estimated numbers provided by the businesses for 2009 and 2010, as at the time, these were not yet verified. Clearly, the businesses have a strong incentive to overstate estimate of these numbers in order to justify their claims for increased capex.

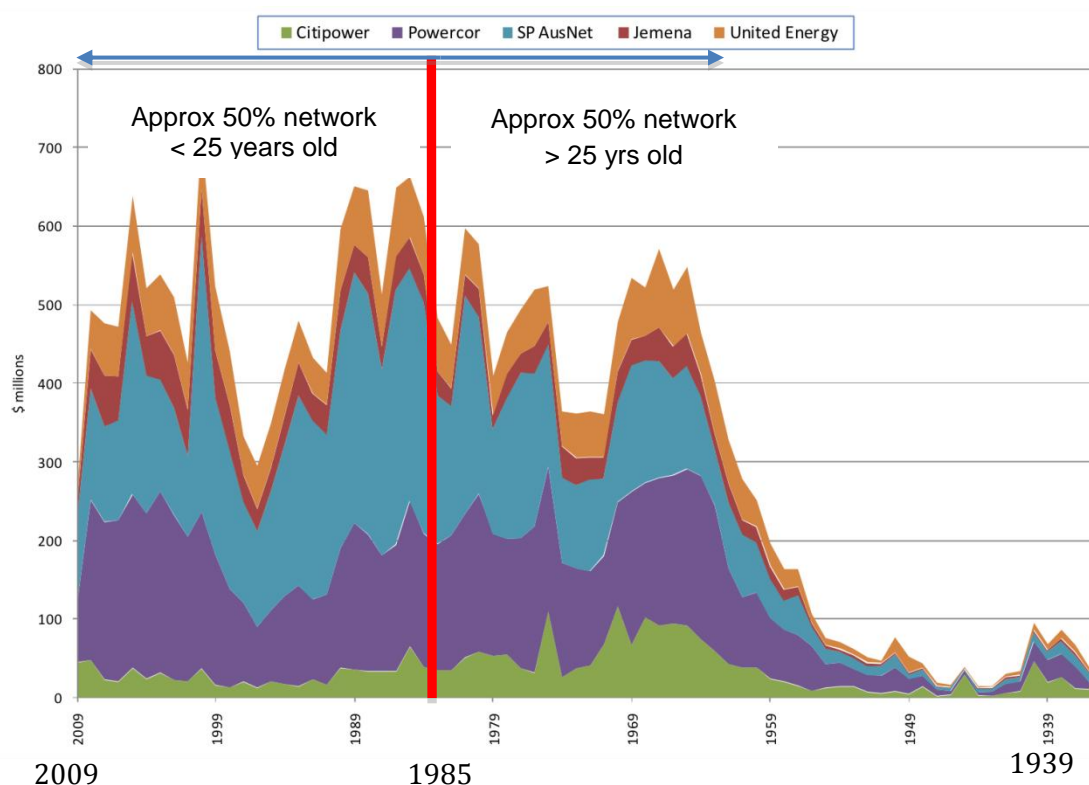
6.2. Replacement capex – Reliability and Quality Maintained

In the Reliability Quality Maintained (RQM) category, also known as the 'asset replacement' category in the NSW and Queensland and South Australian decisions, the Victorian businesses proposed capital expenditures aimed at maintaining reliability and security of the distribution network at existing demand and customer number levels.

The total capex proposed for RQM across the 5 Victorian businesses was \$1.3 billion (\$'2010), which is 85 per cent higher in real terms, than the current period expenditure estimates, including the unverified 2009 and 2010 estimates. This category makes up around a quarter of the total capex forecast by the businesses and is the largest of the system asset related capex sub-categories.¹¹ The DNSP's justified this forecast increase based on a belief that their networks are now beginning to age rapidly and there is therefore an urgent need to start replacing some of the older components of the network.

The age profile of the network, however, suggests a more subdued increase in required replacement. This can be seen from Figure 7, which shows that while there is a portion of the network this is relatively old, the vast bulk of the Victorian distribution network was installed in the years since 1960, making the majority of the network less than 50 years old. Moreover, it is clear that around half the network is less than 25 years old. Nuttall Consulting calculated the average ages of the 5 businesses' networks to be between 24 and 37 years old with a state wide average of approximately 28 years.¹²

Figure 7: Aggregate Victorian DNSP asset age profile¹³



In assessing the proposed expenditures, the AER applied an approach adapted from

¹¹ The next largest after customer contribution is Reinforcement and Customer Connections .

¹² Nuttall Consulting, *Report – Capital Expenditure Victorian Electricity Distribution Revenue Review, A report to the AER, Final Report*, Table 2, p. 34, 4 June 2010.

¹³ Nuttall Consulting, *Report – Capital Expenditure Victorian Electricity Distribution Revenue Review, A report to the AER, Final Report*, 4 June 2010”, Figure 9, p. 33, June 2010.

In assessing the proposed expenditures, the AER applied an approach adapted from the British energy regulator, Ofgem and referred to as the ‘repex’ model discussed in more detail below. Using this approach, the AER was able to identify that a large portion of forecast capex increases were unnecessary and determined a reduced allowance of \$840 million (\$2010), a real reduction of 36 per cent below the distributors’ proposals.

6.2.1. The ‘Repex’ Model

The AER’s repex model was developed by Nuttall Consulting based on a model used by Ofgem in the United Kingdom. It is noteworthy that the model used by Ofgem was developed by John Douglas of PB Power in the UK and first used in Ofgem’s DCPR4 review.¹⁴

The model was based on the proposition that the asset age parameter in the replacement algorithm can be used as a proxy for a combination of the key drivers of asset replacement, these being changes in or observed needs for:

- Condition (reliability, failure, obsolescence).
- Environmental (oil filled apparatus, overhead lines).
- Safety (poorly performing switchgear, line fittings).
- Asset performance (increased functionality).
- Operating costs (repair and maintenance, losses).¹⁵

A. Criticism of the use of “reveal cost” approach in assessing RQM capex

The businesses all took issue with the AER’s use of historical expenditures and the “revealed cost” approach, which we commented on earlier in this submission. These issues were again brought up in criticising the AER’s assessment of the RQM capex using the repex model.

SP AusNet engaged NERA Economic Consulting’s UK based consultant, Graham Shuttleworth, to comment on the repex model, as well as the revealed cost approach. Citipower and Powercor also raised this issue. In their reports they all anchored their attack to one of the AER’s statement that “...*historic trend cannot completely determine future requirements...*”.¹⁶

The critics used this as evidence to suggest an inconsistency in the AER’s approach. For example, NERA stated:

¹⁴ John Douglas, “Asset Replacement: The Regulator’s View”, *PB Network*, #68, August 2008.

¹⁵ “Replacement Of The Ageing Asset Base – The Challenge To Regulators”, John Douglas, PB Power, The CIRED 19th International Conference on Electricity Distribution, Vienna, 21-24 May 2007.

¹⁶ “*AER Draft Decision on Opex and Capex Allowances - A Report for SP AusNet*”, NERA Economic Consulting, 19 July 2010, p 10, Citipower revised regulatory proposal: 2011-2015, 21 July 2010, p 25, Powercor revised regulatory proposal: 2011-2015, 21 July 2010, p 27.

“...Furthermore, in at least one instance, the draft determination contains statements that call into question the relevance of historic expenditures to forecasts of future expenditures...”

In their revised proposals, Citipower and Powercor said:

“With the exception of customer connections capex (in respect of which CitiPower accepts a revealed cost approach may be appropriate), historical expenditure is not a reasonable basis on which to prepare forecasts of capex for 2011-15 that reasonably reflect the capex criteria.”

However, they have selectively quoted part of the AER’s statements on pages 399, 409, 419, and 429 of the draft determination. For example, the quote from page 399 is:

“The AER considers the variability of the capex amounts in this category relates to the variation in expenditure priorities on the basis of each DNSP’s assessment of its relevant safety and compliance risks. Therefore, the historic trend cannot completely determine future requirements should the Victorian DNSPs significantly alter their approach to the management of compliance risks. However, the historic trend capex should include expenditures for changes which have eventuated in the current regulatory control period.”

This was a conditional statement and related specifically to the past period’s Environmental, Safety and Legal expenditures. The other three occasions the AER made a similar statement were for capex sub-categories with significant variability over the historical period in question, and these were: SCADA and System Control, Non-Network-IT, and Non-Network-Other.

In our view, there are two points that should be made in response to the businesses’ objections:

1. The AER had never made such blanket statements about the limitations of historical trend analysis. Drawing conclusions from their quoted words either about the repex model’s use of historical calibration, or the “revealed cost” approach in general has no logical integrity.
2. Furthermore, neither the AER nor Nuttall Consulting use the notion of the past trends to make an immediate or linear prediction of the future. That would clearly be far too simplistic. Rather, they rely on the past expenditures and additional data such as replacement volumes, to model the businesses’ responses to a given set of needs or drivers.

B. The use of age as proxy for the various replacement drivers

The issue of the use of age as the key driver in the repex model was challenged by the businesses and their consultants. For example, PB Associates, engaged by Citipower, Powercor, and Jemena, said:

“As the businesses have based their replacement capex proposals on asset condition and other business drivers, and in the absence of any consideration of the activity code level asset categories, PB considers that the use of age as a proxy for condition is not a reasonable assumption when uniformly applied across all activity codes.”

The objection seems to rest on the level of aggregation of data at which the use of age as a proxy for all drivers is valid. This criticism contradicts a reasonable interpretation of the way the model was designed to be used in practice. That is, it is a way of overcoming the asymmetry of information and resources faced by the regulator, and could therefore necessarily imply some loss of precision. To expand on this, it is useful to elaborate a little on the design of the model as discussed by PB Power in the UK.

As mentioned earlier, the repex model’s methodology is well founded in regulatory precedent, having been used by Ofgem since 2004 in their DPCR4 review. As we also pointed out earlier, PB themselves, developed the original model used by Ofgem in the UK. The philosophy and logic behind the model was explain by John Douglas of PB as follows:

“A regulatory price control review is generally conducted every four to five years. As part of that process, and to ensure that an appropriate and sustainable level of network performance is achieved at an efficient level of cost, three tests of the efficiency of proposed investment may be applied by a regulator:

- *justifiable need*
- *efficient design and life-cycle cost and*
- *appropriate timing.*

...

However the resources available to a regulator, mainly data, manpower and time, are limited and there is also asymmetry of information and resources between a network operator and a regulator. The regulator therefore needs to be able to model the required level of asset replacement without recourse to a detailed and time-consuming analysis of the asset base.

...

The model considers asset age profiles, unit costs of asset categories and uses asset age as a proxy for condition, based on lives attained.

...

In a number of cases where the modelled quantities exceeded the actual replacements, the asset lives were extended to reflect those actually being attained

and were then applied to the modelling of the asset replacement quantities for the forecast period”¹⁷

Hence, the limited resources and asymmetry of information available to the regulator precludes the detailed bottom-up type of review that the businesses claim must be conducted. Indeed, over reliance on such a review would be likely to result in the information asymmetry enjoyed by the businesses compromising the regulatory process. Granted, there may be some loss of accuracy, but the alternative is impossible to achieve, that is a detailed forensic review of all existing information, and may well yield an outcome that is too much dominated by the interests of the Victorian distributors. That would be detrimental to consumers and the National Electricity Objective.

Given the lack of detailed and consistent data and knowledge available to the regulator, this would suggest that this is a problem that is inherent in, and can be expected from any regulatory approach. It stands to reason that this was considered when Ofgem adopted the use of the repex model.

C. Asset ages implied by the model are unrealistically long

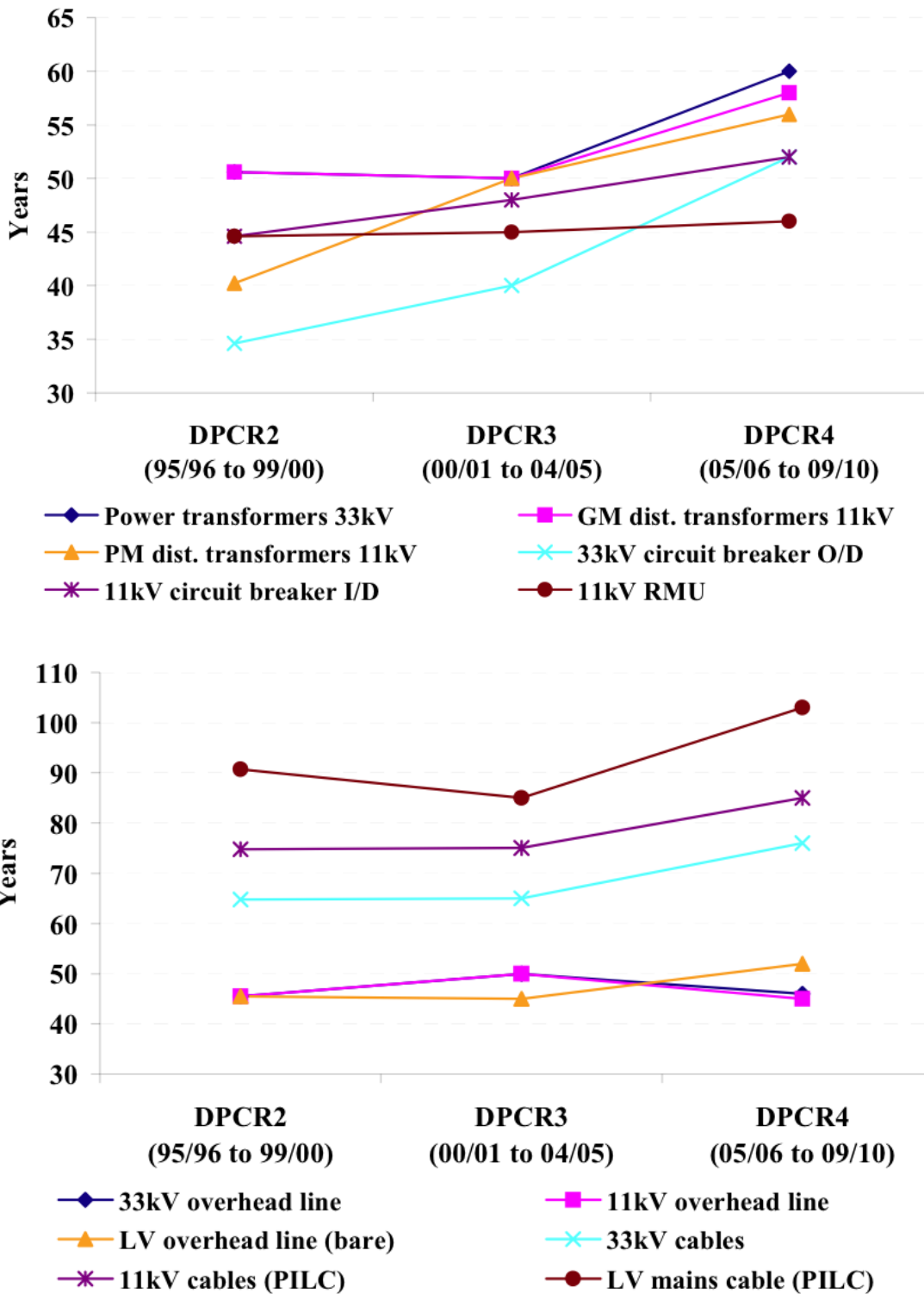
PB Associates raised an additional objection. They were concerned that the AER’s calibrated ages cannot be useful since they imply some asset lives that are unrealistic.

However, this is realistic and, in fact, observed as assets lives can actually exceed technical or economic lives as reported by the businesses in their database, as they reflect a range of measures businesses can take to extend the assets lives, or simply that some assets can be useful beyond their rated age. This can be seen in Figure 8, which shows that the expected lives of many asset classes have, in fact, grown across the United Kingdom’s distribution networks reflecting lives that are extending as condition assessment techniques improve, according to Douglas.

PB Associates in their reports for Citipower, Powercor, and Jemena focus on underground cables and argued that the model is flawed since it produces lives that can be around 100 years in age. However, the brown line in the lower chart in Figure 8 shows that in the UK similar ages of LV mains cables had been observed for DCPR4 suggesting that such an age for this type of asset is not unusual.

¹⁷ “Replacement Of The Ageing Asset Base – The Challenge To Regulators”, John Douglas, PB Power, the CIRED 19th International Conference on Electricity Distribution, Vienna, 21-24 May 2007

Figure 8: Changes and growth in average asset ages in the UK¹⁷



D. Criticism of the Black-Box nature of the repex model

Some of the businesses and their consultant, PB Power, also objected to the use of the repex model on the grounds that it is a “black-box” model and the ORG in their 2001-05 decision criticised the Black-Box approach used to forecast repex by the businesses.

The issue fundamentally is one of what is meant by a 'black box' and transparency. We agree that truly 'Black-box' models are problematic since they cannot be easily tested and reviewed. We also note that the AER's repex model is open for public scrutiny and the AER and Nuttall Consulting made all data and assumptions available, including the software code in the model. In our view, the model does not lack transparency and the businesses should be able to readily assess it and even reproduce its results if they so desired.

It is also possible that the DNSP's are referring to the complexity of the repex model as rendering it "black-box' in nature, but complexity does not in itself render it a "black-box'. It is to be expected that any model used for forecasting expenditures in a category as large as RQM, will be complex and require a good deal of data processing and calibration. We expect that the substantial resources available to the DNSPs would allow them ample scope to overcome a lack of understanding due to complexity. Their engagement of consultants shows their ability to marshal resources for such tasks. However, their use of consultants seems to have been limited to criticizing the AER's model and approach rather than overcoming any difficult modelling issues.

E. Claimed inconsistency of Nuttall approach to DNSP's use of CBRM

Citipower, Powercor and their consultant PB Power, and some of the other DNSP's criticised what they perceived as an inconsistency between Nuttall Consulting's statements on the usability of asset management methods, such as Condition Based Risk Management (CBRM), in preparing asset management plans and Nuttall Consulting's rejection of their appropriateness for the preparation of regulatory forecasts. However, we see no contradiction in the AER's and Nuttall Consulting's approach here. Nuttall Consulting clearly set out their views on the limitations of the CBRM approach on page 110 of their report:

"The important point here is that the model appears to be primarily an asset management tool that allows assets to be targeted and prioritised over the short to long term. It is expected however that following this modelling exercise far more detailed reviews and testing will occur prior to any replacements being approved."

We understand this to mean that the CBRM's used by the businesses for identifying and prioritising asset replacement needs is quite appropriate. However, Nuttall and the AER judged that it cannot be used in determining the prudence or efficiency of the assets' replacement at a given time and that the repex is much more appropriate for the purposes of regulatory reviews. Whilst we accept that the businesses are best placed to make operational decisions about asset replacement, we also believe that the regulator is better placed to determine matters that go to the heart of regulatory settings such as allowed replacement capex.

F. Criticisms of the use of the 2004-2008 period data

The businesses levelled several criticisms at the use of historical data by Nuttall and the AER. In particular, they claimed the inconsistent use of 2004-2008 versus 2006-2008 data, and the rejecting of the use of expenditures for years 2009 and 2010.

In our view the use of the data is consistent with the repex methodology as described by Nuttall Consulting. That is, the 2004-2008 replacement *volumes* were used to calibrate the asset life data. Since the actual cost data was only available for the shorter period of 2006 to 2008, only that period was used to set the unit costs parameters of the model.

With respect to the use of the data for 2009 to 2010, this data was not in final audited form when the AER conducted its review, as the businesses provided only estimates. Under the regulatory framework, there is an incentive for the businesses to overstate these estimates and it is only right that they should not be included in the actual expenditure as this would risk biasing the outcomes to the detriment of electricity consumers.

G. SP AusNet and NERA's claim of misuse of repex model

As mentioned earlier, SP AusNet engaged NERA Economic Consulting to advise them on the AER's approach. NERA claimed that the AER and Nuttall Consulting misapplied the repex model because:

“ ...

- *Ofgem's replacement model was not calibrated to historical levels of expenditure, but rather to the current average asset lives on replacement. Thus, the calibration reflected current company asset life policy, not recent levels of expenditure;*
- *While reliant on a correctly calibrated high level replacement model as a top down check, Ofgem departed from its model findings between the Interim and Final Proposals as result of detailed discussions between the companies and Ofgem and a detailed analysis of the bottom up cases presented by the businesses; and,*
- *As a result, Ofgem added £265 million to the Interim replacement expenditure allowance (based on their replacement model) in the Final Proposals. The businesses levelled several criticisms at the use of historical data by Nuttall.*

...¹⁸

The more substantive of the criticisms is the first statement, and in reviewing NERA's report, we found that they misinterpreted what the Nuttall Consulting did. They describe Ofgem's approach as:

¹⁸ SPI Electricity Pty Ltd, *Electricity Distribution Price Review 2011-2015 Revised Regulatory Proposal*, July 2010, p. 122.

*“To construct its model, Ofgem requires the age of assets on the network and a profile of retirements, ie, life expectancies for each asset class for each DNO. The DNOs provide the age of the assets on their networks and Ofgem assumes a retirement profile implied by the average asset lives achieved on assets that were replaced in DPCR4”.*¹⁹

The above paragraph seems to describe exactly what Nuttall Consulting did. That is, they did not simply use the expenditures in the current period, they used the historical values to impute the asset ages “achieved” on replacement. The evidence presented by NERA actually supports the approach adopted.

The second and third points above are not consequential when one observes that the increase Ofgem allowed of £265 million across all the British DNO’s, is only 7% of the £3,589 allowed for the asset replacement category by Ofgem in DCPR5. We also note that the release of the Draft Determination affords the businesses and other stakeholders an opportunity to comment on the AER’s proposals and the AER to respond to these, which is precisely what would have occurred in the case of the Ofgem review.

H. Other criticisms of the repex model

The above discussions address only a selection of the more substantive criticisms levelled by the businesses and their consultants. Other criticisms raised seem to be relatively inconsequential.

6.2.2. Conclusions on RQM capex review

In conclusion, the EUAA welcomes the comprehensive analysis of RQM capex review performed by the AER and Nuttall Consulting. We believe that the approach is an example of good regulatory practice and seeks to ensure efficiencies extracted in previous periods are preserved and extended into the next period. We believe that the AER has struck a reasonable balance between cost efficiency and the maintaining reliable supply.

6.3. Ample opportunities for RQM from 2001 onwards

The DNSP’s say that the allowance proposed in the AER’s Draft Determination is too low for comfort and system performance would be at serious risk. This has already been publicly stated by some of the businesses in the Media, during the AER pre-determination conference on 11th July 2010, and in their revised proposals. However, we note that the businesses claim of urgency on the need to address aging assets is not consistent with their activities in the

¹⁹ NERA Consulting, *AER Draft Decision on Opex and Capex Allowances, A Report for SP AusNet*, 19 July 2010, p. 27.

previous two regulatory periods. This can be deduced from the fact that the age profile of the networks is known and a lot of the necessary replacement could have been foreseen and acted on in advance. The DNSP's have been successfully maintaining the reliability of their networks over the current and previous regulatory periods. The history of expenditures since 2001 is telling, since we can observe the network businesses underspending the capex allowed by the ESC and ORG, which they had also expressed concerns about at the time. In fact, the AER's figures show that over this period they underspent capex by 16%, or around \$900m, thereby benefiting from the difference between the allowed revenues and their actual costs. This being the case, one could argue that if the need for reliability maintenance was as urgent as the Victorian DNSP's statements suggest, there was the opportunity for them to invest the \$900m in total capex that they were allowed to spend over the previous 10 years. This suggests that there is no particular reason to support a sudden and large increase in RQM capex now. We urge the AER to carefully consider the evidence.

7. OPEX

We pointed out in our submission on the Victorian DNSP regulatory proposals that the businesses had forecast substantial increases in opex in previous regulatory periods and had achieved actual expenditures that were lower than forecast; and noted that the businesses will outperform their opex benchmarks in the current regulatory period – also highlighted by the AER.

The AER proposed a reduction to opex of 18% in their Draft Decision. We support this reduction overall, and recognise that the AER will be placed under considerable pressure by the businesses to increase the opex allowances before it releases its Final Determination.

As mentioned earlier in this submission, we are disappointed that a proper benchmarking analysis has not been applied to the opex proposals by the Victorian businesses, however, we note that the revealed cost approach at least highlights the past trends and underspends in opex by the Victorian DNSPs. Given that the opex reflects the well understood and hitherto well managed operations of mature technology assets, we see no reason why this trend would not continue. This would suggest that there could be scope for further reductions (efficiencies) in the next regulatory period.

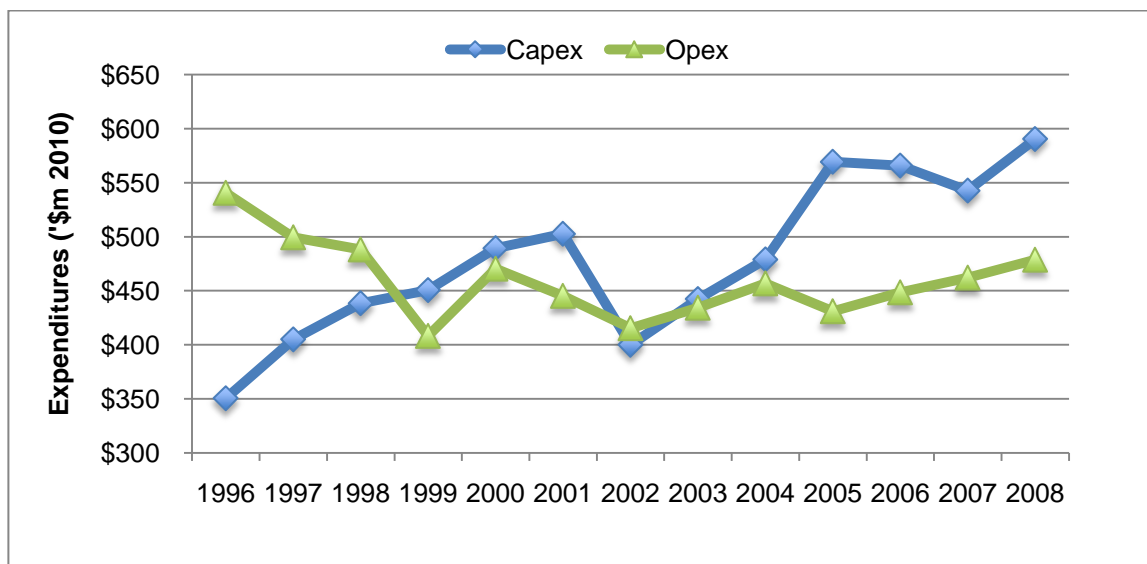
The AER has selected 2009 as the “benchmark” opex that would be incurred by “an efficient DSNP over the regulatory control period”. The AER states that it uses the last known costs, or penultimate year, as the benchmark year. Once this has been established, the AER adjusts the base year figures to set an allowed expenditure. This approach relies on the idea that the “revealed expenditure”, i.e. the expenditure that the business incurred in some previous year is, by definition, efficient expenditure.²⁰ This appears to be based on the view that opex generally does not vary much in its composition from year to year (with respect to various subcategories of expenditure). That is, the main change is due to various rate escalations,

²⁰ EUAA, *Submission to the Australian Energy Regulator on its Draft Decision for the regulated revenues to be applied to Energex and Ergon Energy in the period from 1 July 2010 to 30 June 2015*, p.22.

and that therefore the most recent year's expenditures and their composition provides the most up to date estimate of their true or efficient costs. This could presumably be contrasted to capex where its variability can be expected due to discrete large project related expenditures that are irregular and require several years to complete. This assumption is not borne out in practice, however, if one analyses actual opex and capex from 1996 to 2008 (all available data since privatisation).

It is evident from Figure 9 that there is significant variability in opex from year to year. Numerically it is around half that of capex, based on our analysis of the annual data. We can conclude that this may either be due to changes in some of the opex sub-categories, or due to variability in the cost rates. Either way, this casts doubt over any assumptions regarding the last year of the period unambiguously reflecting efficient costs. While it may well be reflective of efficient costs, we can see no evidence that the final year must be the most efficient. The AER should identify a more robust method of assessing efficient opex and we again draw the AER's attention to our discussion of benchmarking in previous submissions.

Figure 9: Opex and Capex variability in Victorian DNSP's since 1996



The AER used unaudited actual expenditures from Citipower, Jemena and Powercor for setting allowances in its draft decision, as audited expenditures were not available for consideration until late in the process. The EUAA supports the AER's intention to use the audited expenditures when assessing its final decision. We also note that this issue may be avoided by using alternative and more established approaches such as Benchmarking.

The AER has a number of concerns over United Energy's opex proposal related to the tendering processes for the intended separation of its network into two geographical regions under United Energy's new business model²¹; and its salary estimations. The AER was concerned over the degree of estimation involved in its assessment of internal salaries and the

²¹ AER, *Victorian electricity distribution network service providers distribution determination 2011-2015*, Draft Determination, p. 227,

inclusion of 15 percent salary bonuses for a majority of staff members. The AER will need to rigorously assess any resubmitted salary and bonus estimates. The EUAA has no objections to performance bonuses, however, bonuses should reflect improved performance especially where it also benefits a businesses customers, in this case electricity end users in United Energy's area.

We feel that the AER has not adequately addressed the concerns of the EUCV submission in regard to opex increases that result from increasing customer density, which it says would result in marginal increases in opex.²² The AER's adopted growth drivers do not seem to take into account the EUCV's concerns where the AER makes scale escalations based on the physical size of the network. This is especially important for those businesses whose regions will experience increasing customer density rather than extensions of the network. We urge the AER to make adjustments where necessary to address the impact of customer density on opex.

8. Cost of capital

We have reviewed the Draft Decision on the cost of capital, and the proposals by the distributors. Our views are as follows:

- **Averaging period for the risk free rate:** We support the AER's choice of the averaging period for the risk free rate (i.e. as close as reasonably possible to the start of the regulatory period). We disagree with the approach adopted by the Australian Competition Tribunal, and believe that the AER is right to resist it. We have assessed the ACT decision in detail and found it to be flawed in logic and understanding of fundamental elements of the regulatory process. We have previously provided a copy of this work to the AER.
- **Equity beta:** We disagree with the AER's proposed equity beta of 0.8. We explained our position on this in our submission on the WACC review and we have not seen any new evidence to suggest we should change this view.
- **Market risk premium:** We agree with the AER's rebuttal of the distributors' proposal to raise the market risk premium to 8 per cent.

On the debt risk premium (DRP), we are very concerned that the AER has set this level around three times higher than it should be. As a result prices are around 7 per cent higher than they should be. This results in distributor profits over the regulatory period that will be around \$560m higher. We have commissioned a report on the DRP from Bruce Mountain which we have attached to this paper. The report examines this issue in detail and we suggest that it provides compelling evidence to support our view.

We raised our concerns about the DRP in the AER's pre-determination conference and in our submission on the businesses' proposals. We have also previously raised our concerns about the DRP in the AER's decision on the revenue/price caps for the two Queensland distributors. In response to our submission, the AER described the evidence we provided as an "isolated

²² Ibid p. 251.

experience”, and also rejected our argument that the AER should have regard to the cost of debt issued in international capital markets.²³ We disagree with both of these, as set out in the paper by Bruce Mountain referred to above.

The Mountain paper proposes that the AER takes a different approach to the assessment of the DRP than the approach that it has taken in the Draft Decision. We appreciate that the AER may have concerns about procedural fairness in adopting this approach between its draft and final decisions. While we do not agree that there is a concern here, we would be very disappointed if this was used as a reason not to take account of the evidence in that the Mountain paper in the Final Decision. Therefore, we propose as a solution to this, that the AER might separately issue the Mountain paper as a basis for specific consultation, in advance of the Final Decision. We also note that procedural fairness is not asymmetric and that end users are also entitled to expect this in relation to important issues that they raise that they legitimately expect to alter the regulator’s position significantly.

9. Service targets

The EUAA generally supports the notion of setting service targets and revenue at risk for the distribution businesses. However, we have been disappointed that there has been no inclusion of quality of supply parameters into the STPIS. We advocated for such targets in the New South Wales, Queensland and South Australian distribution determinations, as quality of supply has a significant impact on business consumers of electricity (small and large). Industrial and commercial users have invested significant capital in sensitive equipment that requires high power quality to function optimally and to its full life span. When it does not they can incur significant costs.

The distribution businesses in Victoria were required to install quality of supply monitoring equipment at each zone substation and at distribution feeders supplied from each zone substation as a result of the 2006-2010 Electricity Distribution Price Review, with the view to having quality of supply targets for future regulatory reviews²⁴. The ESCV stated that it would not establish quality of supply parameters for its service incentive regime for the current regulatory period and the AER has decided to continue this for the next regulatory period. Moreover, the ESCV stated that a continued focus on quality of supply for the 2006-2010 regulatory period would provide an accurate picture of the quality of supply for Victorian electricity users; and that an improved data set would provide for measurable and quantifiable improvements in quality of supply.²⁵ We note that both the ESCV and the Essential Services Commission of South Australia (ESCoSA) have made some attempts to address quality of supply issues for their domestic electricity users. We are disappointed that after ten years of regulation in Victoria, there has been no quality of supply incentives placed on the distribution businesses in Victoria and that the progress foreshadowed by the ESCV at the time of its last determination is not being addressed by the AER. This seems to us to be a case of national regulation taking a step backwards compared to the previous state regime and falling back on

²³ Australian Energy Regulator, May 2010. “Queensland distribution determination 2010-2011 to 2014-15”, page 243.

²⁴ ESCV, *Electricity Distribution Price Review 2006: Final Framework and Approach Volume*, June 2004, p.36.

²⁵ ESCV, *Electricity Distribution Price Review 2006-10 Final Decision Volume 1*, October 2005, p.51.

a lowest common denominator. We would see that the AER address this shortcoming in its Final Determination.

10. Victorian Bush Fire Royal Commission Issues

Since the AER released its Draft Determination, the Victorian Bushfire Royal Commission (VBRC) has released its final report and it contains some significant recommendations for reducing the risk of electricity related bushfires, especially on extreme days of bushfire risk and in areas highly prone to bushfires. The most significant recommendation is one that could involve the undergrounding or bundling of cables in such areas, or other options that could similarly mitigate bushfire risks. This recommendation is still being assessed by the Victorian Government. The EUAA recognises that the tragic circumstances that occurred on 'Black Saturday', especially the unacceptable loss of life, should not be repeated again if at all possible and the desire of the VBRC to ensure this. We also desire to see that this is done in the most efficient and cost effective manner with involvement from local communities.

The recommendation to underground, bundle or otherwise deal with lines that have the highest bushfire risk is an important one which could have major cost implications and impacts on distribution prices. Unfortunately, the VBRC did not undertake detailed costing or cost-benefit assessment of this recommendation (perhaps this was not its role?). Given this, the Victorian Government needs to carefully assess, properly cost, and also subject to cost-benefit analysis this recommendation before it is acted upon. The important question of who should bear the costs also needs to be carefully considered. The EUAA has told the Victorian Government this and that it would expect proper consultation on these matters. We have also made it known that we believe it would be inefficient and inequitable to place the burden of paying for such upgrades on energy users, especially those in the networks most directly affected, ie, Powercor and SP AusNet. First principles would suggest that those most directly affected (benefiting) should pay the costs although an argument can be made that the broader Victorian community benefits to some extent and could therefore bear some of the costs, noting that this does not mean all electricity users. We anticipate further involvement in the Victorian Government's consideration of this recommendation.

In terms of this review by the AER, we would urge a cautious approach to these matters. Costs submitted by the distributors need to be carefully and rigorously assessed and should not be accepted prior to decisions being made by the Victorian Government. The same rigor that the AER has applied to other aspects of capex and opex needs to be applied to ensure that any costs incurred are efficient and do not place undue burdens on energy users.

The AER has indicated that it may apply a pass-through approach to matters associated with the VBRC. Regardless of which approach it uses, the AER should ensure that there is a rigorous assessment of pass through applications from the distributors, that there is adequate consultation on these matters and that end users are involved. If decisions by the Victorian Government that involve major VBRC related costs are forthcoming before the AER finalises its review, then this assessment and consultation on the proposals should take place beforehand.

