

# *Energy Users Coalition of Victoria*

**Australian Energy Regulator**

**Victorian Electricity Distribution Revenue Reset**

**Applications**

**from**

**CitiPower, Jemena, PowerCor, SP Ausnet and United  
Energy**

**A response**

**by**

**Energy Users Coalition of Victoria**

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The content and conclusions reached are the work of the EUCV and its consultants.

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## Executive Summary

The Energy Users Coalition of Victoria (EUCV) welcomes the opportunity to provide its view on the applications for a revenue reset by the Victorian electricity distributors CitiPower, Jemena, PowerCor, SP Ausnet and United Energy.

EUCV draws attention to some significant aspects of the revenue reset.

**First**, the impacts of the applications will dramatically increase the cost of power supplies to consumers in Victoria. The EUCV is of the view that such dramatically higher tariff rises are not only excessive, but also unjustifiable. They will result in considerable hardship to many Victorian electricity consumers and have adverse impacts on downstream industries, already under pressure from the effects of the Global Financial Crisis.

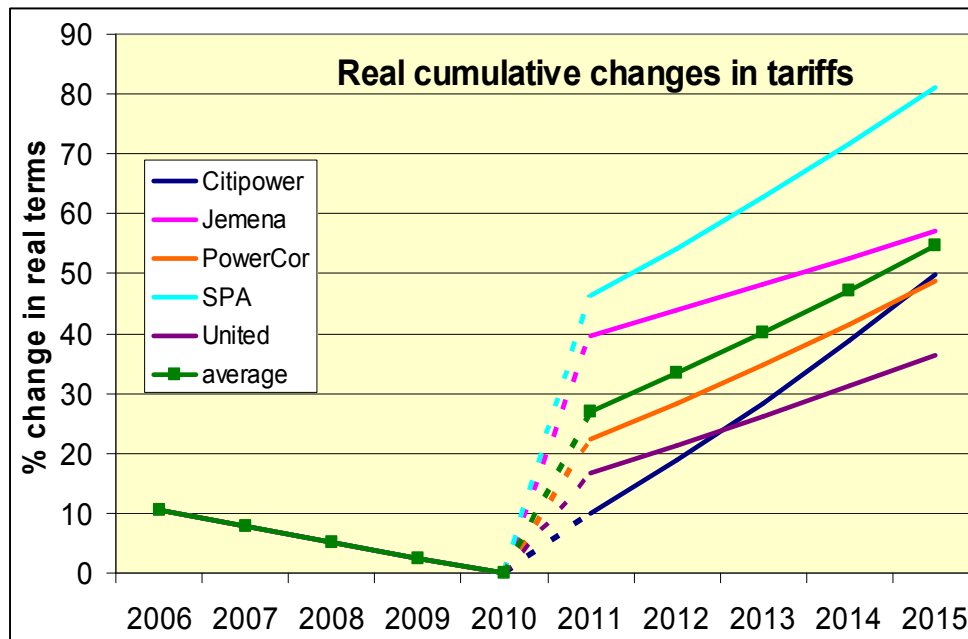
**Second**, the review is being undertaken by the AER under a **price cap approach** and not under a revenue cap approach as applies to electricity transmission businesses and some distribution businesses. This is an important distinction as the Victorian DBs draw on many of the AER decisions made in relation to the revenue cap decisions to support their arguments for increased costs. With a price cap approach there is potential for further growth in revenue by the network business as a result of growth in demand and consumption following the regulatory final decision; this does not apply to a revenue cap approach. Therefore, much of the costs the Victorian DBs will incur resulting from growth is met from the increased revenue associated with this growth. The EUCV response considers that aspects of the applications for requiring additional revenue have little justification because of this difference. It seems that all regulated businesses use previous decisions of the AER to ramp up their justifications for increased revenue – this approach of the regulated businesses is a form of regulatory gaming and the AER needs to address the matter at every reset review.

**Third**, the MCE changes to the Chapter 6 Rules require the AER (unlike those Rules applying to the previous jurisdictional regulators) to be more heavily involved in the development of tariffs and to ensure that the resultant tariffs and the related pricing structure are as close as reasonable to cost reflectivity, rather than within in the range of avoided cost to stand alone cost. This is a critical issue and could have been a major reason for the 30% to 50% network price increase experienced by large energy users following the AER's recent NSW pricing review of network business.

The above aspects are being emphasized by EUCV because it is demonstrably clear that the Victorian DB applications are ambitious ambit claims:-

- The result of the DB proposals shows that, on an arithmetic average basis (shown by the green line in the chart below), tariffs in Victoria will rise by about 30% as a step change between the regulatory

periods followed by annual increases of some 5% thereafter. These tariff rises are shown graphically in the following chart which also shows the tariff reductions achieved in the current period<sup>1</sup>.



Source: Victorian DBs applications, ESCV FD 2005

- Significantly increased capex proposals, which bear little relationship to the forecast growth in demand and consumption.
- Significantly increased opex proposals, which are not the result of step changes imposed on the Victorian DBs
- Insufficient and inappropriate justification for the inflated cost claims.
- Assessments of capital investment, which do not relate risk to timing of the investment, preventing a careful assessment of whether delays in capital investment are appropriate or not.

Overall, the EUCV considers that the Victorian DBs have utilised every opportunity to inflate costs in their applications as they recognise that the Rules now provide very limited recourse after the event for the AER to make future restitution for over-compensating the regulated entities.

It is clear to the EUCV that the decisions made by ESCV in 2005 have delivered an electricity network service that meets the needs of Victorian electricity consumers. To change from the proven ESCV approach and deliver unwarranted large increases in revenue to the Victorian DBs would

<sup>1</sup> The ESCV decision in 2005 resulted in all DBs having the same annual reduction after different  $P_0$  adjustments for each DB to apply between 2005 and 2006

demonstrate regulatory failure. The ESCV established sound regulatory practices when it was responsible for reviewing and setting the Victorian DBs regulatory allowances and the AER is urged to maintain such standards.

The EUCV points out that, even under the current ESCV regime, the DBs have prospered significantly, and this indicates that the ESCV approach must be seen as conservative, and variations to it which unjustifiably increase revenue to the DBs are not appropriate.

For example, in the current regulatory period (and indeed in earlier periods) the DBs have consistently achieved more revenue from consumers than was expected by the regulator and have exceeded the profitability targets set by regulators for every year since deregulation in 1996 (see AER figures 2.1 to 2.5 in its Victorian Electricity Distribution Businesses Comparative Performance Report 2008). At the same time, increases in consumption have not been the main trigger of this increased profitability as the 2008 financial data from the AER report shows:

<b>2008 data</b>	Increase in revenue	Increase in consumption	Forecast pretax return	Actual pretax return
CitiPower	6.5%	3.4%	6.6%	8.5%
Jemena	9.6%	4.4%	6.5%	10.8%
Powercor	8.4%	0.9%	6.2%	9.0%
SP Ausnet	4.1%	1.3%	6.7%	8.0%
United	5.1%	-0.6%	6.0%	8.4%

Source: AER

With such positive outcomes from a previous regulatory approach which was much more stringent in its assessment of increased claimed allowances for opex and capex, the AER needs to be vigilant and must also examine closely the claims made by the DBs for such large opex and capex claims made in the current applications in the context of recent DB performance.

## 1. Introduction

### 1.1 The EUCV

The Energy Users Coalition of Victoria (EUCV) is a forum representing large energy consumers in Victoria. The EUCV is an affiliate of the Major Energy Users Inc (MEU), which comprises some 20 major energy using companies in NSW, Victoria, SA, WA, NT, Tasmania and Queensland.

The EUCV welcomes the opportunity to provide comments on the AER's review of the revenue reset for the Victorian electricity distribution businesses.

Analysis of the electricity usage by the members of EUCV shows that in aggregate they consume a significant proportion of the electricity generated in Victoria. As such, they are highly dependent on the transmission and distribution networks to deliver efficiently the electricity so essential to their operations. Many of the members are heavily dependent on local suppliers of hardware and services. As a consequence, members consider they have an obligation to represent the views of these local suppliers. With this in mind, the members require their views to not only represent the views of large energy users but also those of smaller power using facilities, and even of the residences used by their workforces.

The companies represented by the EUCV (and their suppliers) have identified that they have an interest in the **cost** of the energy networks services as this comprises a large cost element in their electricity and gas bills.

Although electricity is an essential source of energy required by each member company in order to maintain operations, a failure in the supply of electricity (or gas) effectively will cause every business affected to cease production, and members' experiences are no different. Thus the **reliable supply** of electricity (and gas) is an essential element of each member's business operations.

With the introduction of highly sensitive equipment required to maintain operations at the highest level of productivity, the **quality** of energy supplies has become increasingly important with the focus on the performance of the distribution businesses because they control the quality of electricity and gas delivered. Variation of electricity voltage (especially voltage sags and spikes, momentary interruptions, and transients) and gas pressure by even small amounts now has the ability to shut down critical elements of many production processes. Thus member companies have become increasingly more dependent on the quality of electricity and gas services supplied.

Each of the businesses represented by EUCV has invested considerable capital in establishing their operations and in order that they can recover the

capital costs invested, long-term **sustainability** of energy supplies is required. If sustainable supplies of energy at a reasonable cost are not available into the future these investments will have little value.

Accordingly, EUCV (and its affiliate MEU) are keen to address the issues that impact on the **cost, reliability, quality** and the long term **sustainability** of their gas and electricity supplies.

The members of EUCV have identified that distribution plays a pivotal role in the electricity market as it is the method whereby the needs of a vast number of consumers, each with their particular needs can access the essential service of electricity supply in a way which is best suited to their needs. Consumers recognise that the cost of providing the distribution network is not an insignificant element of the total cost of delivered electricity, and is the element in the supply chain which has the lowest reliability of supply.

## 1.2 The scope of this review

EUCV recognises that the AER is required to carry out its review in accordance with the recently changed Chapter 6 of the Electricity Rules without any transition Rules applying (as they did for the recent NSW distribution review. These new Rules (being based on the AEMC developed transmission Rules) need to be seen as being pro investment for electricity businesses, as the AEMC stated that this was the focus of its Rule development approach. Equally, consumers have assessed the new Rules (both transmission and distribution) to be biased and unbalanced, as they clearly favour the electricity businesses and their use to date has seen very large increases in costs to consumers.

It is noted that the determination of the regulatory asset base is quite closely proscribed with regard to the inputs to the CAPM used to develop the WACC, whilst not fully predetermined by transition Rules (as in the case for the NSW distribution review) or by the recent AER WACC parameter determination (as is the case for transmission), the EUCV considers the AER must take significant cognizance of its recent determination on WACC, which was released in May of 2009. In addition, the EUCV notes that the degree to which the AER can determine any exclusion of future actual capital expenditure is limited, and that the AER must allow the regulated businesses extensive freedom in determining the amount of depreciation to be included in the revenue. Despite these constraints the EUCV expects that the AER will apply rigorous attention to ensuring that the cost elements allowed, reflect financial reality, and the ability of the DBs to deliver on their proposals.

In principle, these Rule changes result in a reduced scope for the exercise of independent regulatory judgment by the AER and the determination of outcomes from the review is based more on a mechanical process.

**There is, however, an element of the MCE changes to Chapter 6 which requires the AER to be more heavily involved in – this is the development of the ultimate tariffs and their pricing structure which will result in the AER having more involvement than in previous distribution reset reviews. The previous decisions of jurisdictional regulators were not as exposed to this aspect as the AER now is. The EUCV (and MEU) has had significant involvement in this aspect of the MCE’s pricing methodologies in the Rules determination and views on this element will be presented later in this submission.**

### **1.3 A review of the ESCV reset activities in 2005**

In 2005, the ESCV provided a very interesting paper summarizing the applications made by the five Victorian DBs, and including the lessons learned by the regulator after two reviews and the commencement of the third review. In its Position Paper<sup>2</sup> the ESCV provided the following insights to electricity regulation (page 6):

“The electricity distribution price review, which will determine the price controls to apply to the Victorian electricity distribution businesses for the 2006-10 regulatory period, provides an opportunity to reflect on the experience and outcomes of almost two regulatory periods. In reviewing this experience the Commission has observed, among other things, some trends which have important implications for the regulatory decisions ahead, for the industry and for electricity customers. These observations include:

- Tariff revenue (actual and forecast) for the 2001-03 period has exceeded the benchmark level provided for that period in the 2001-05 determination, due to a combination of higher than forecast growth and tariff re-structuring, by 7.3 per cent.
- The actual expenditure undertaken to date by the distributors in aggregate has been less than provided for in the 2001-05 determination and even further below the levels forecast by the distributors as being required during the period. For example, aggregate operating expenditure for the period 2001-03 has been reported as being \$245 million (19 per cent) below benchmark levels for that period, and \$585 million (36 per cent) below the distributors’ forecasts. Aggregate capital expenditure for the same period has been reported as \$561 million (33 per cent) below benchmark levels, and \$690 million (38 per cent) below the distributors’ forecasts.

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<sup>2</sup> ESCV Electricity Distribution Price Review 2006-10, Position Paper March 2005



- The distributors' forecast expenditure for the 2006-10 regulatory period considerably exceeds the levels of expenditure undertaken to date in the current period. For example, the aggregate operating expenditure forecast is \$394 million (23 per cent) higher than the actual and estimated expenditure levels during the 2001-05 period<sup>1</sup>, while the aggregate capital expenditure forecast is \$1,137 million (54 per cent) higher.
- Although actual expenditure undertaken to date is significantly below forecast and growth in distributed energy and customer numbers has generally exceeded forecast, the reliability of service provision has been generally maintained or improved during the current period.

It is possibly a result of these concerns that the ESCV and the Victorian government have been strong supporters of a move away from the building block (BB) approach to regulation, to an approach based on total factor productivity (TFP). Whilst the EUCV is not necessarily supporting TFP, it does recognize that TFP does eliminate a number of drawbacks of the BB approach.

The EUCV strongly recommends the AER review in detail the concerns raised by the ESCV in its Position Paper, and the approaches the ESCV takes to minimize the clearly identified aggressive stances the five DBs adopted in the 2005 review program. Where practicable (bearing in mind the changes to the Rules promulgated in 2008), the AER could not do worse than taking a similar approach to that adopted by the ESCV in the 2005 review.

#### **1.4 An overview of the Victorian DBs capex applications**

It is quite clear that the DBs have taken to heart that the new Rules are to encourage investment in distribution networks. Across the board capex demands are significantly inflated from the current period, as is opex. Against this backdrop, it is noted that AEMO is forecasting a very modest increase in consumption (in stark contrast to the DBs views that consumption will reduce over the period), and a slightly higher increased forecast in demand projected.

For this massive increase in expenditure, consumers will have to pay considerably more, but ironically, will receive if anything a lower service! The regulatory bargain is now so unbalanced that it has undergone a major shift in favour of the distribution business. What is totally missing from the applications is an assessment of value for money.

The DBs have requested a real step increase in revenue at the start of the next period followed by real increases for each of the following years. What is not addressed by the DBs (other than a peculiar view that the increased

cost of distribution is a minor element when seen in context of the overall cost of electricity) is the impact this will have on electricity consumers specifically their ability to pay for such large annual increases.

The EUCV considers there is essentially an inconsistent proposition being propounded by the DBs. Either ESCV was badly incorrect in the setting of the revenues for the DBs in 2005, or the DBs are using the new Electricity Rules and a new regulatory regime to attempt to convince the AER that they are entitled to such large step increases now and high annual increases thereafter. The EUCV points to the fact that across all DBs, they have tended to underspend the allowances given by ESCV indicating they can provide the services implicit in the regulatory bargain for much less than they are seeking in the new period. This clearly supports the EUCV view that the claims by the DBs are ambit.

In this regard, it is pertinent to highlight a recent press release from Spark Infrastructure (part owner of Victorian DBs Utilities, CitiPower and PowerCor). In the Australian Financial Review 25 August 2009 (page 20), in the following article released in relation to the application by ETSA Utilities (a pattern followed by the Victorian DBs), the market views the application by ETSA and the performance of the AER in relation to the revenue review of the NSW DBs, as one purely driven by profits more than need.

#### **“Expansion to power earnings**

... Spark infrastructure is confident a proposal to the federal energy regulator to more than double capital expenditure over the next five years will succeed.

Spark is hopeful of a positive result when the Australian Energy Regulator tables its interim decision by the end of November

The group approached the agency about two months ago, seeking permission to lift prices by 10 per cent a year

...“We are confident our justifications will stand up” [said Spark CEO Laura Reed]”

The clear import of such a report is that Spark seeks to increase the capex allowances so that it will increase its profitability. This is the same view that EUCV has in regard to the large claims by the Victorian DBs for capex for the coming period and EUCV adjures the AER to assess the capex claims in this light.

**The main issue for the AER (other than the bottom up assessment of the Victorian DB applications) is to develop a holistic view of whether**

**the claims being made are valid and whether consumers will be able to pay for the hikes in revenue.** It is not merely an issue of agreeing that these monopolies can just continue to increase their charges on the basis that consumers have no alternatives. Electricity supply is an essential service and it is simply insufficient for the regulator to continually allow increases in the costs of essential services until parts of the community can no longer afford to pay. At one end of the scale economically disadvantaged consumers will either suffer or have to be directly assisted by government. At the other end of the scale, businesses will no longer be able to afford the charges and will either close or move offshore. Either way the costs will still remain and have to be carried by fewer consumers, further increasing unit prices.

Another major consideration that the AER must make, is whether the capital investment being proposed can be managed effectively in a national environment where, due to decisions being made by regulators, there is likely to be significant pressure on the capital expenditure aspirations of the electricity industry as a whole as they attempt to carryout the large volume of investment projects, against a background of limited resources of labour, plant and materials used in the electricity industry.

In this regard, the AER should assess not so much that there may be a need for the capex claimed by Victorian DBs, but whether all these capital projects is essential **to be implemented now** and can it be accepted that to carryout such an enhanced program when resources are likely to be scarce (and therefore more expensive) due to all other electricity monopolies implementing large capital programs, that such commitments can be considered economically efficient. As the National Electricity Law objective requires the AER to ensure regulated businesses are permitted only "...efficient investment in ... electricity services ..." the AER must take into account whether deferral of some of the proposed investments is likely to result in a more economically efficient outcome. The second reading speech for the NEL makes it very clear that reference to efficiency in the objective must be considered in economic terms:

"The market objective is an economic concept and should be interpreted as such. For example, investment in and use of electricity services will be efficient when services are supplied in the long run at least cost, resources including infrastructure are used to deliver the greatest possible benefit..."<sup>3</sup>

The Victorian DBs provide many reasons (and many have some legitimacy) for needing their large capex programs but there is no attempt to demonstrate whether the implementation of these programs **in the time frames proposed** when economic conditions are so uncertain and when resources in the electricity supply industry might be scarce, is efficient in economic terms.

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<sup>3</sup> SA House of Assembly 9 February 2005, Hansard page 1452

In a number of aspects the DBs point to the changes in the Victorian government (especially in relation to bushfires) and ESCV requirements for reliability as a reason to increase their capex claims. The EUCV is concerned that supplies of power are made reliable and sustainable, but we also recognise that it is not essential that all reliability capex programs must be implemented immediately, and that deferring some work is feasible. There is a need to balance the costs of improving this reliability at a time when costs might be under pressure, with the deferral of the work to times when resources (and hence costs) are more available.

In fact, all the DBs provided the same information which they allege demonstrates that the costs for the capex program are well above long term price indices, and this is used by all to justify the higher cost of their targeted capex programs. This then raises a fundamental question – would a prudent investor build now, or would the prudent investor defer investing at a time when costs are higher than normal.

It is quite clear that the prudent investor would defer investing if costs are likely to fall in the future, and if the market it sought to benefit from would remain. As monopolies, electricity transport businesses do not need to time their investments to meet expected changes in the market, as deferral will not deprive it of increased demand for its products nor allow the entry of competitors. Regardless of whether the investment is to be made now or at some time in the future, the sales and revenue for such entities will be essentially the same.

**Thus in the environment the electricity transport businesses operate in, there is no market imperative to invest immediately, but there is a requirement under the NEL, that investments must be efficient. Careful analysis is required to ensure that investment is not being made when the imperative to do so is low, and where deferment would lead to lower (and therefore more efficient) costs.**

#### **1.4 An overview of the DB opex applications**

There has been considerable debate regarding opex benchmarking. The AER has pointed out that comparative benchmarking (ie benchmarking against a range of similar businesses) is but one tool the AER is required to use in assessing reasonable levels of opex for a DB. The EUCV notes this but then raises the aspect that unless self benchmarking (ie using a business's own performance as the key criterion) is used as the primary tool for setting a business's opex, then the basis of using the EBSS to encourage a DB to best practice is bound to fail.

The AER has clearly stated that<sup>4</sup>:

“The EBSS has been designed to [provide] an incentive for the DNSP to reveal its efficient level of expenditure through the retention of efficiency gains for five years after the year in which the gain is made. It will be used to calculate revenue increments or decrements that provide for a fair sharing of efficiency gains/losses between distribution network users and DNSPs. The revenue increments/decrements are derived from the operating expenditure (opex) of DNSPs being less/more than the forecast opex.”

The introduction of the incentive scheme to ensure opex is most efficient for Victorian electricity DBs was introduced in 2000 and continued in 2005. In 2005 the ESCV utilized the actual opex incurred by the DBs and rigorously applied this as the benchmark opex allowance, and allowed only those step changes which were new to the period. The purpose behind this approach was to identify the level of efficient operating expense for each DB so that this level could be used from which analysis of step changes could be made so that opex continued to be efficient.

**In the Victorian EDPR of 2005 the regulator (ESCV) implemented a very structured approach to step changes and required each DB to disclose in detail the impacts of the various step changes they had identified to warrant an increase in opex. The ESCV denied a number of the step changes claimed as it considered there was no step change warranted. The ESCV went further and challenged the amounts claimed for each sustainable step change.**

What we are seeing is a new growth industry to convince the AER that opex must be consistently increased at each regulatory review. In particular, we are seeing the DBs consistently underspend allowed opex in the early years of a regulatory period (as the AER explanatory statement on the EBSS notes this is expected as the business gains maximum benefit from the EBSS for early year gains) and then increasing the opex for the later years (especially the fourth year) as this is usually used as the benchmark year). Consistently the expected opex for the fifth year is estimated by the businesses to be higher again than the fourth year giving notional support for the fourth year as the benchmark, but also to indicate the earlier year underspends were unsustainable. A quick NPV calculation shows that this approach to opex (even incurring higher than allowed amounts in years 4 and 5) is commercially attractive for the regulatory period, but is also attractive in the long term as it ratchets up the allowed opex for subsequent periods.

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<sup>4</sup> AER Explanatory Statement, Proposed Electricity distribution network service providers efficiency benefit sharing scheme, April 2008 (page 4)

**Despite the fact that growth in consumption and demand is projected to be less than inflation (as measured by the consumer price index) all the DBs have applied for large step changes in opex.**

### 1.5 The EUCV'S General View

The EUCV is supportive of the requirement for reliable security and quality of supply of electricity and is not opposed to network augmentations and additions, provided the investments are **efficient** and they are implemented by a **prudent** network business.

Against that background, it is instructive to refer to the Minister's Second Reading Speech (on the National Electricity Law):

"...the national electricity market objective in the new National Electricity law is to promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity, and the safety, reliability and security of the national electricity system. The market objective is an economic concept and should be interpreted as such. For example, **investment in and use of electricity services will be efficient when services are supplied in the long run at least cost**, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities. **The long term interest of consumers of electricity requires the economic welfare of consumers, over the long term, to be maximized.** If the National Electricity Market is efficient in an economic sense the long term economic interests of consumers in respect of price, quality, reliability, safety and security of electricity services will be maximized" (emphasis added).

**To permit expenditure (or allow recovery of actual costs or of costs never incurred such as indexation adjustments) that is inefficient or unnecessary, or for costs previously charged to consumers as expenses of a business, could not be described as supplying services at least cost or maximizing the welfare of consumers.**

The EUCV would expect the AER to have regard to the ability of the DBs and SP PowerNet (with its ex ante allowances for capex), which together have been granted or are proposing some \$6.3 billion in capex for this regulatory period, to implement such a significant large combined capital program in Victoria against the background of:

- Potential supply constraints in the industries supplying equipment and materials to the electricity transport industries in SA, NSW, Victoria, Tasmania and Queensland

- Potential constraints in the supply of skilled labour due to the large capital programs already approved in other regions by the AER and thereby limiting resources.

These constraints are against the following backdrop:

- Over \$30 billion in new power generation assets reported to be required over the next 5 or so years in the National Electricity Market.
- The investment in the electricity supply chain to manage the increase in renewable electricity required under the xRET.
- Over \$6 billion in new capex already approved by the AER at regulatory resets for ElectraNet, TransGrid, Transend and Powerlink.
- Over \$27 billion in new capex that has been allowed in the draft decisions (Queensland and SA) or been granted (NSW) for electricity network businesses in Queensland, SA and NSW in this regulatory cycle, and to this has to be added the capex claimed by Western Power in WA and about to be claimed by the Victorian DBs.
- In addition to these amounts is an expectation of additional capex resulting from the decision to allow the inclusion of contingent projects as well as the agreed ante capex amounts allowed for in regulatory decisions.

The overwhelming challenge for the DBs is to ensure that the investments (in capex) it proposes are **efficient** (i.e. “in the long run at least cost”) and that they are being undertaken by a **prudent** network business.

Businesses in a competitive environment make judgments on investment based on such requirements as the potential to recover the planned return on the costs needed for the investment, ability to deliver a project on time and to budget, cost (including short term supply pressures), ability of customers to absorb cost increases, the ability to defer the investment and the risks associated with deferral. In the case of a regulated business, prima facie, it only has to convince the regulator it needs to expend the funds and effectively does not take responsibility for whether the investment will generate the required revenue, or even whether it over-runs on costs, as the Rules allow actual costs to be rolled into the RAB, regardless as to whether the costs are demonstrably prudent.

Unfortunately, gaining regulatory approvals for capital expenditure has been observed to be far too easily obtained, with greater emphasis given to the stated wants of the business rather than the imposition of strong development of capital controls.

In this regard, it is to be noted that one of the reasons given by regulated businesses for needing to invest more capital now, is that under previous government ownership and control, the businesses were starved of capital, due to the competing needs within the government budgets. Another construct that could be applied though, is that governments (just as do

businesses in the competitive environment) applied very strict requirements on capital expenditure.

As can be seen from the regulatory decisions made since governments handed over the responsibility of providing the necessary discipline on monopolies to jurisdictional and national regulators, the obtaining of approval to incur capital expenditure (based on a requirement for consumers to pay) has seen an explosion of new capital works undertaken, combined with very large increases in opex. This clearly demonstrates that regulators are failing consumers and not acting in concert with the NEL objective by not applying the same level of discipline on regulated electricity providers as was applied by governments themselves, when acting as owners of the assets.

**As the Rules clearly require that the electricity transport businesses must provide economically efficient investment, the AER should require them to demonstrate why there is a need to provide a large capital expenditure program and to provide a risk analysis which balances the risks of deferral against the risks of excessive capital cost resulting from unnecessarily early investment at a higher cost.**

In this regard, the AER should recognise that if they allow the electricity transport businesses to invest capital at a time where there are high costs of implementation, the impact of such potentially unnecessary costs will be felt by consumers for the next half century. The EUCV accepts that it is the Rules that reduces the risks to the electricity businesses of inappropriate investment, as future regulators are not permitted to reopen costs previously incurred, which was the case before when regulators were allowed to optimise previous decisions. It was this ability to optimise in the future, that applied some pressure on the regulated businesses to only implement investment when it was absolutely necessary.

In the absence of this discipline, it is now a requirement on the regulator to apply robust analysis and ensure that economically inefficient investment is not undertaken. There is only one opportunity to ensure investments approved are efficient. The AER can achieve this by limiting capex allowances, and by ensuring that only needed capex is permitted, and deferring capex that can be deferred with minimal impact on the reliability of the system.

## 1.6 Summary

It is essential that regulatory price reviews do not lose sight of the basic fact that if the regulator keeps on allowing increases in capex and opex, the prices the networks will charge for providing an essential service will take the cost of electricity beyond the ability of competitive industry and many consumers (especially disadvantaged consumers) to pay.



We are already seeing price pressures on power from generators using market power (in SA, Tasmania and recently in NSW and Victoria) to increase the price of generation well above the cost of making power. We are also seeing power prices being increased to allow for the expanded MRET and CPRS schemes, not to mention additional costs arising from increased market volatility and risks.

The jurisdictional regulators have permitted large increases in their recent distribution revenue reviews and if a similar approach is taken in relation to the Victorian DB reviews, the essential service that is electricity supply in this day and age, will become unavailable to many consumers and cause manufacturing to migrate off shore, resulting in the de-industrialization of the Australian economy.

Regulators need to recognise that as more and more large power users either move off shore or close down, this will result in those fewer consumers remaining having to carry an even greater share of the electricity supply chain prices, driving price up even higher.

## **2. Total Ex-Ante Capital Allowance**

### **2.1 An overview of the Victorian DBs capex claim**

The EUCV has already commented on the constraints facing the electricity transport businesses in implementing their capex proposals and has effectively suggested that the AER and its consultants review the projects proposed by Victorian DBs carefully in the light of a range of identified factors, including the scope for regulatory gaming.

**The EUCV acknowledges that there is a reducing load factor in the networks, driven predominantly by the growth and penetration of residential air conditioning. The increasing demand resulting from this trend is not matched by the same increase in consumption, and as a result load factor is reducing. The outworkings of this reducing load factor is a need to increase capex to match the change in demand rather than in consumption. This means that capex needs are better related to changes in peak demand rather than consumption. Despite this, the increases in capex needs identified by the businesses, far exceed the growth in peak demand. This raises the issue that the Victorian DBs (and the AER) ensure that the costs for matching this increase in capex are properly recovered from those causing the need.**

Victorian DBs has sought to provide justification for the significant increase in capex proposals as being due to:

- Growth, especially peak demand growth
- Reliability obligations, as part of licence conditions
- Asset renewal, as a result of ageing asset profiles.

**On the surface, there would appear to be considerable scope for capital deferment or smoothing in the third area above (i.e. asset renewal) through targeted maintenance programs, and the AER should develop a set of principles to guide its assessments of asset renewal that could be deferred into another regulatory period. However, there is also scope for capex avoidance in the first two areas above (i.e. growth and reliability obligation). Here, the AER and its consultants need to rigorously test the capex proposals submitted. For example, why is it absolutely necessary for such obligations to become sacrosanct? Under government control the vertically integrated Victorian DBs were required to allocate the limited capital made available to them by the government, to maximise reliability and to ensure new consumers were able to share the benefits of the networks, i.e. manage risks (a concept not at all foreign to normal businesses in a competitive environment).**

In the EUCV's view, the AER has another important challenge in assessing capex proposals. As a result of the biased and unbalanced<sup>5</sup> Chapter 6 Rules determination (based on the AEMC development of the chapter 6A Rules for transmission which overtly over incentivise investments), there is so much scope for network businesses to game the regulatory process, so much so that they could, metaphorically, drive a truck through the AER's approved capex program. Under the Rules:

- The capex program requires formal demonstration of need only for a small component of the network business's program – i.e. for augmentation programs greater in value than \$10 million (the Regulatory Test)
- There is no ex post review allowed of capex to ensure prudence or efficiency
- Once set, the network business can use the capex allowance for any project and need not use it for any project used to justify the allowance in the first instance
- If a network business decides, it can defer any capex project used as the basis of its approved capex program, and keep the financial benefit
- The AER must include in the asset base all capex incurred without assessing whether the amounts should be included, even if the network business incurs an unnecessary over-run in costs (which is very likely in this current regulatory cycle of significant infrastructural investments and as the Rules permit the network business to maintain a cost-plus culture).
- Capex projects identified as contingent projects at a reset, can be added to the allowed revenue after a reset, and the costs passed on to consumers, even if the original ex ante capex allowance has not been used
- A network business is able to obtain an increase in revenue allowances by converting a capex program to network support (which is permitted to increase the opex allowance), yet the business is allowed to retain the full financial benefit associated with the replaced capex allowance.

**The risks to consumers arising from the Rules are significant, as the AER's discretion is limited. The risks are not only that capex programs would be so inflated by the incentives determined by the AEMC and MCE Rule changes, but also the Regulatory Asset Base would be inflated by regulatory gaming. The risks that the expected explosion in capex and the RAB would extend beyond the forthcoming regulatory period are very real and very significant. Against this background, the AER and its consultants would need to rigorously**

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<sup>5</sup> Biased and unbalanced in the view that investment has to be incentivised so that cost of errors and imprudent investments will be borne by consumers rather than the business making the decision.

**examine ex-ante capex and contingent capex projects with the view to limiting the scope for gaming to inflate the capex program and RAB over the next two regulatory periods.**

As all firms know, it is relatively easy to justify capex from a bottom up assessment. What is more difficult is to ensure that the capex claimed is justifiable from a market perspective. Victorian DBs provide data which shows that the market indicators (consumption and demand) are not escalating at a rate that justifies the massive injection of capital that is being claimed. In a competitive environment, the directors of a firm would require proponents of a capital expenditure program to demonstrate one or more of the following before allowing a capital expenditure program:

- There is an increase in demand in the market justifying the capital project so as to meet the expected increases of customer demand (in this case the market is not providing this support)
- The injection of the capital will increase market share (in this case Victorian DBs are a monopoly and hold 100% of market share)
- The injection of capital will maintain the current level of market share (in this case there may be a need for some capital to maintain the reliability of the existing assets).

In the following analysis of the Victorian DBs application, the EUCV shows a trend based on the 2008 actual capex, extrapolated by the forecast growth in demand. The EUCV concedes that it provides an indication only. In fact EUCV considers that the growth in demand is not an unreasonable basis for extrapolation of capex needs.

In its EDPR Position Paper (page 58) the ESCV took a similar view to the EUCV, in that it stated:

“The Commission maintains the view that the trend in capex continues to be an appropriate starting point for considering each distributor’s capex forecasts for the 2006-10 regulatory period. The Commission notes that capex at a disaggregated level may be lumpy, but exhibits a trend at an aggregated level. To assess the reasonableness of the price-service proposals, the Commission continues to require that variations in the trend be explained and supported with robust quantitative and qualitative information.

In reaching its draft decision, the Commission will consider the historic trend in capex in addition to its consultants’ report and supporting information provided by the distributors.”

In its Final Decision (page 258) the ESCV confirmed they would apply this approach and stated:

“Given the incentives that distributors have to over-state their future capital expenditure requirements, the Commission also considered that it was appropriate to apply considerable discipline on the distributors to support their expenditure proposals. For this reason, the Commission believed that any assessment of future capital expenditure should take into account historic levels of capital expenditure, with variations from such historic levels being supported by cogent reasons.”

The ESCV concluded with the view that:

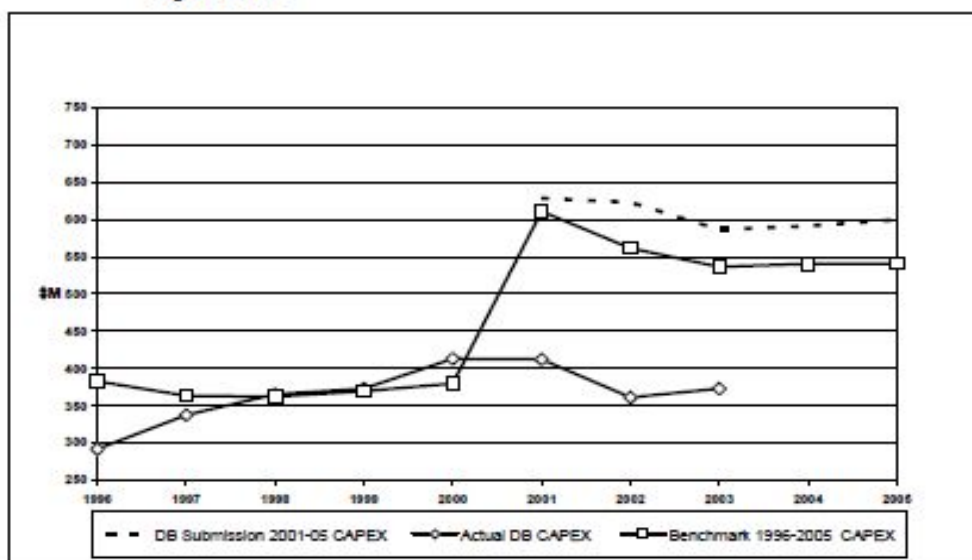
“However, the Commission notes that, in the last price review, the Office of the Regulator-General (ORG) decided that it would take the distributors’ historic and forecast costs of delivering an electricity distribution service as its starting point when setting the 2001-05 benchmarks (ORG 2000a, p. 47).”

The EUCV does not see why the AER cannot take a similar view to the ESCV in this regard as it is clearly sound regulatory practice.

## 2.2 The Victorian DBs capex claims

The following chart shows the ESCV analysis of the capex trends since deregulation and is included in its March 2005 Position Paper for its Electricity Distribution Price Review 2006-10.

**Figure 4.1:** Capital expenditure, aggregated for all distributors, 1996-2005 benchmarks, 1996-2003 actual expenditure, 2004-2010 forecast expenditure



Source: ESCV

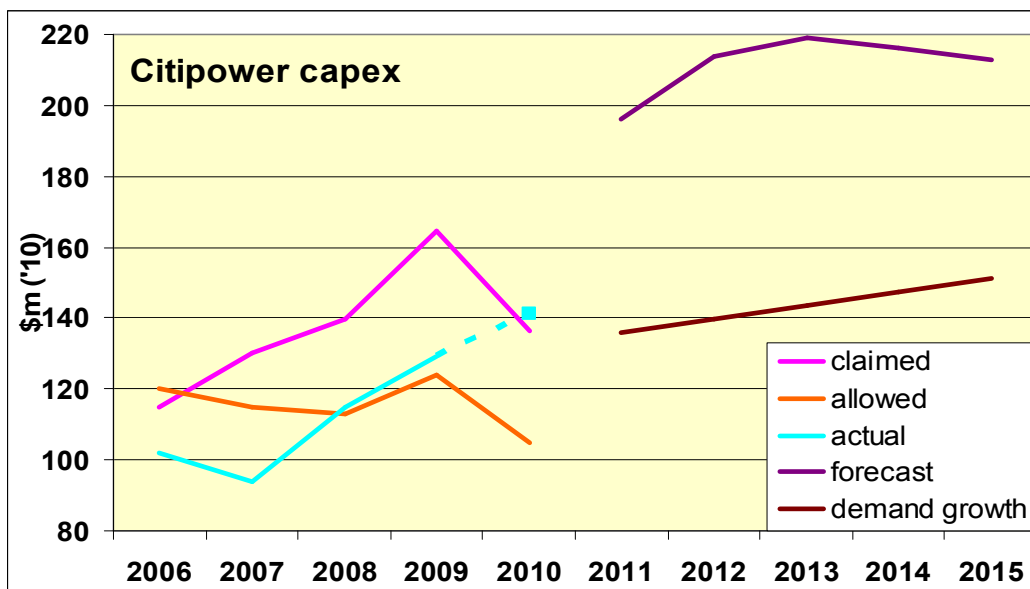
The chart shows that, overall, the DBs have consistently underspent on the allowances granted to them for capex up to the current period, and that

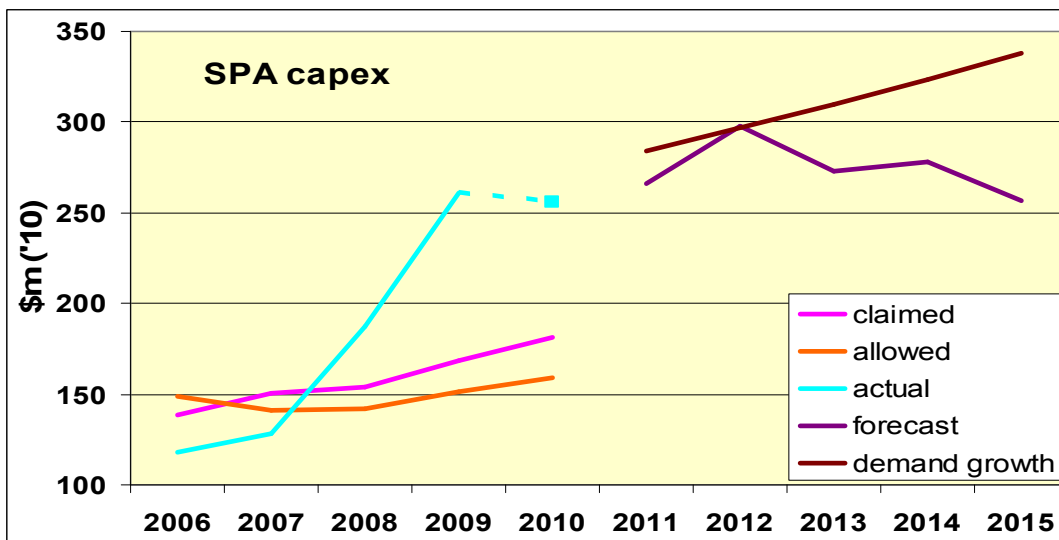
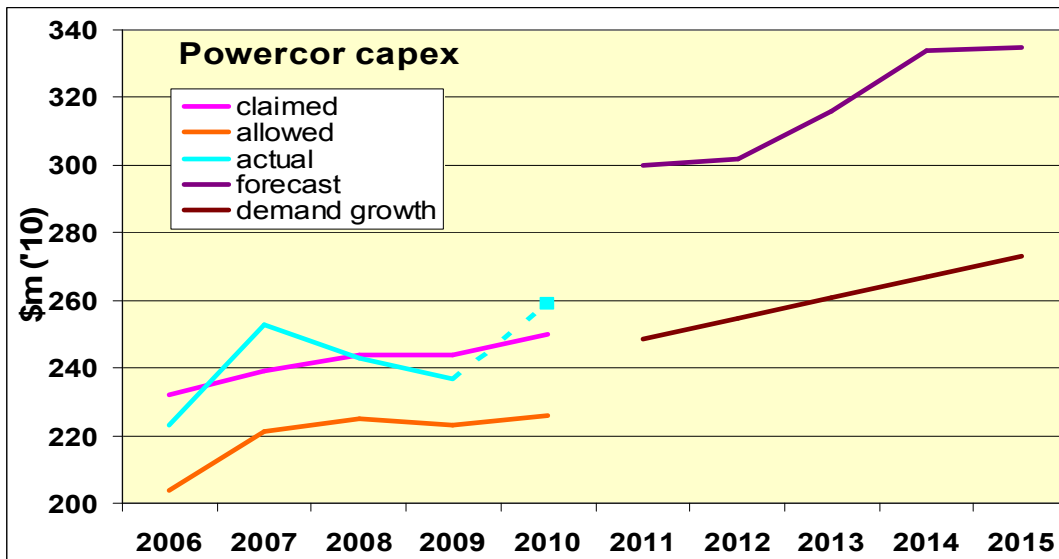
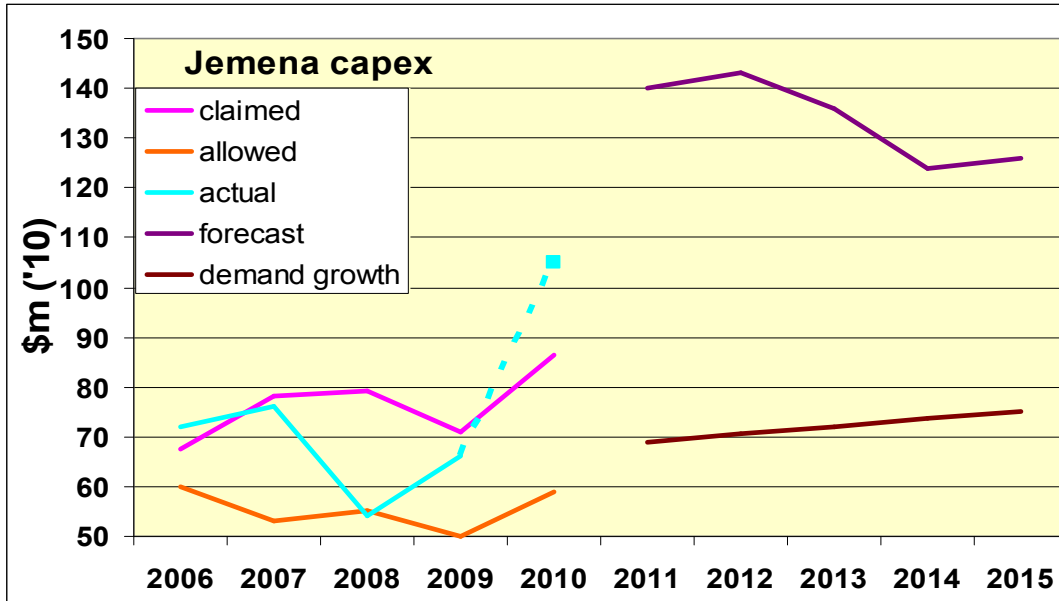
despite underspending the allowances, have claimed significantly more capex was needed than they actually used. This trend of DBs over claiming capex needs and underspending compared to allowances was addressed by the ESCV review in 2005, and as a result the DBs were heavily constrained in the capex they were allowed for the 2006-10 period.

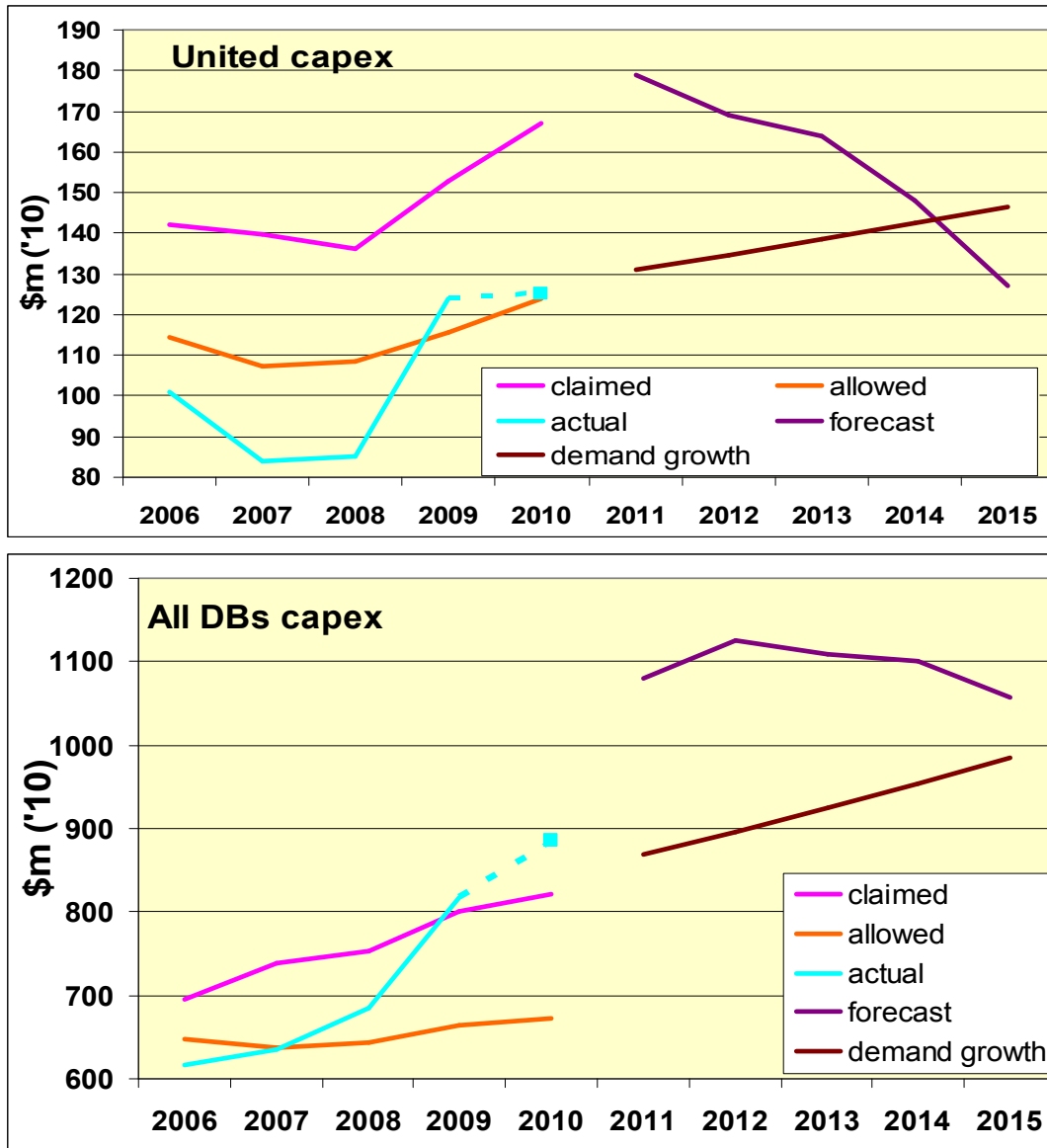
A review of the claims made by the DBs for capex and the ESCV allowances made in the 2006-10 period shows that the DBs claimed in EDPR 2005 significantly more capex than they actually spent, although it must be noted that overall the actual capex of all DBs was higher than the ESCV allowances. Equally, the capex used in the first three years matched the ESCV allowances and the data for 2009 and 2010 is forecast and therefore the amount of capex is still to be confirmed.

The following charts for each DB are based on data from the ESCV final decision in 2005, the DB past and recent applications and the capex trend is based on the 2009 forecast capex and the forecast increases in demand advised by each DB in its application. The charts show:

- The amounts claimed in 2005 by the DBs for the current period
- The current period ESCV allowed capex,
- Actual/forecast capex provided by the DBs in their applications with the last year (2010) shown as indicative,
- The capex forecast by the DBs as needed for the next period, and
- Opex growth trends based on the DBs forecasts of demand growth, using the actual opex for 2009 as the basis.







There are a number of common aspects that all of the applications demonstrate.

- All of the DBs underspent on capex allowed in the early years but it is only the spend in the last two years (both years are forecast and not actual) which shows there is likely to be an overspend. This late period overspend is encouraged by the ESCV decision that it would accept actual capex to be accepted without query. In this regard, the ESCV approach was a forerunner of the new Rules which do not allow a review of actual capex and that actual capex will be accepted for rolling into the RAB. As the late year capex is automatically rolled into the RAB, the DBs face almost no risk by overspending late in the period.
- The amount of capex claimed by the DBs in 2005 for the current period has not been matched and shows a significant under-run. This



reflects what the ESCV observed in their previous reviews and indicated in the figure 4.1 in the ESCV EDPR 2005 position paper. Each DB shows a large forecast increase in the actual capex for 2009 and a further increase is forecast for 2010, and this is typified in the chart of combined DBs.

- Each DB is forecasting a large step increase in capex needs for the next period, and generally a continuing upward trend over the period. This is more clearly seen in the chart combining all DBs.
- The EUCV has provided an indication of future capex needs by using the actual 2009 capex as a starting point, and extrapolating a capex trend using the growth forecasts for peak demand<sup>6</sup> provided by the DBs. In so doing, this provides an indication that the forecast of only one DB (SP Ausnet) might be considered to be reasonable – all other claims seem to be well above that expected based on an increase in peak demand. Overall, capex claimed is significantly higher than that indicated by increases in peak demand.

The EUCV has a real concern that Victorian DBs are attempting to game the system, the new Rules and the guidelines established by the AER. It is clear that they attempted to do likewise in 2000 but the ESCV limited this ability significantly. Unfortunately for Victorian consumers, the ESCV was still “gamed” in 2005 as the DBs have demonstrated that they required much less capex than they sought in 2005. Because of this consistent approach to over claim for capex needs the ESCV was quite aggressive in its allowances for the current period, yet the DB performance for the first three years supports the ESCV decisions on capex. It is only for the forecasts for the uncompleted years that indicate the ESCV might have been too restrictive in its capex allowances.

**The EUCV considers that the AER has a responsibility to ensure that the Victorian DBs capex claims be fully justified and detailed, and that the AER insists on (and gains) supporting evidence of sensible reasons for allowing step changes which prove the need for capex above that generated by the ESCV approach.**

Embedded within all the DBs’ capex claims are a number of recurring themes, all explained as reasons to increase the capex allowances. These are:

- Increased capex above current levels is essential to replace ageing assets. Analysis indicates that capex for replacement assets is modest compared to capex for growth yet the capex sought for growth is massively increased even though the rate of growth by any

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<sup>6</sup> Using increases in peak demand is a reasonable approach as growth capex is usually about half of all capex needed. The increase in peak demand is a higher value than the depreciation rate (reflecting the need to replace aged assets) and so the other major aspect of capex (ie replacement) is reflected in the value used for extrapolation.

measure (numbers, consumption, peak demand) is forecast for the next period to be much less than the 2006-10 regulatory period.

- All of the DBs make reference to their assets management plans as if they are new features which will drive their capex programs. However, the ESCV required asset management programs to be instituted in 2000, and to be refined in 2005. This would indicate that the outcomes of the asset management programs would be no different to those seen in the current regulatory period and therefore there is no driver to justify an increase to the capex as a result.
- All of the DBs advise they have examined the deliverability of their individual capex programs but this is done in isolation. The AER should examine the deliverability in light of the capex programs the AER approves for the other four DBs and, more importantly, the impact of the capex programs the AER has approved in NSW and is likely to approve in Queensland and SA.
- The DBs advise that their unit costs for capex are based on late 2009 values. This is questionable as the unit cost rates the DBs have are based on actual data which were developed in 2008 and some would be based on 2007 actual costs. The AER should have a set time (probably early 2008) as the base for unit costs, which is reasonable and reflective of when the rates are actually demonstrable. Any adjustment to these rates should reflect changes since that time.
- All the DBs comment that much of their capex program is based on achieving reliability of supply, yet the STPIS targets suggested by the DBs tend to be less than the targets actually achieved in 2006-10, with significantly less capex being used in the current period. The EUCV questions how the DBs can justify providing a lesser reliability level (notwithstanding the 'spin' the DBs put to "achieving reliability" of supply) with more capex being invested apparently to achieve the lesser output. The DBs refer to the need to meet the standards required by the Distribution Code, yet the Code does not stipulate levels of reliability, and the AER must establish the reliability/cost trade off to match the regulatory bargain.
- Whilst all the DBs list the various external requirements they are to meet (eg bushfire, OHS, environmental, electrical safety, etc) they do not clearly state which result in increased requirements from those they were managing in the current period with the capex they were using. The principle behind incentive programs, such as the STPIS and EBSS, is that the DBs will self benchmark and provide the most efficient level of expenditure. Therefore, there is an implicit requirement to advise what is changed and not just reiterate the Codes they are required to comply with as justification for increases.

- All the DBs use the principle of assessing new capex under the regulatory test, as being if capex is less than the value of the expected loss of supply (ie unserved energy) multiplied by the value of the loss of supply (VCR) which is set at \$55k/MWh. As with the wholesale market (where USE is set at 0.002%), there is an expectation that it is economically efficient to have some unserved energy in the electricity system, yet the DB approach indicates that there is not an acceptable level which has been determined for the distribution networks. If the current approach is to be continued there are two key aspects that need to be addressed:
  - What is the acceptable level of unserved energy in a distribution network
  - Is the value of VCR at \$55k/MWh economically efficient, especially when in the wholesale market a level of \$12.5k is considered to be sufficient?
- All the DBs claim costs for marketing and community support (such as sponsorship) as part of the allowances they are granted. This covers both capex and opex. The EUCV considers that it is inappropriate for the DBs to be given an allowance for marketing as they are monopolies and therefore do not need to carry out marketing as part of ensuring their competitive position in the market. Secondly the EUCV does not consider that the DBs should be given allowances paid by consumers, for the DBs to provide community support. If the DBs want to provide community support, then the funds should be out of their profits just as any other non-monopoly business must do.
- Whilst the DBs pay lip service to the capex/opex trade off, the amounts of opex they recognize as being saved by the capex, is miniscule.

## 2.2 The Victorian DBs expectation for capex

The combined application shows that the total forecast capital expenditure for all DBs is some \$5.5 billion for the next regulatory period. Of this some:-

- 55% of this is due to augmentations (reinforcements and new connections)
- 30% for asset replacement and delivering security, safety and reliability
- 15% for IT and non-network expenditure

The very high proportion of capex dedicated to reinforcements and new connections appears very much at odds with the expected growth in peak demand. It is accepted that the investment in reinforcement might be

somewhat “lumpy” but when the capex over all the DBs is considered, the “lumpiness” is significantly smoothed. The degree of “lumpiness” for new connections is modest.

**The Victorian DBs applications show a massive increase in capex, far outstripping demand, and seems to indicate that it is seeking an additional \$200pa (or a total of \$1.0 billion overall) in excess of needs. The Victorian DBs claim is totally inconsistent with conventionally accepted criteria for a step change, and at most should be no more than \$500m for the period, or \$100m pa. The excess claimed is more than 100% of what is assumed to be reasonable based on the historical capex needs.**

**In this regard it should be noted that in its last review Victorian DBs claimed about \$400m pa more capex than ESCV allowed it, although it is accepted that the DBs did overspend the ESCV allowance but only by an average of 6% (\$30m pa) excluding the forecast over-run for year 2010.**

The EUCV has a real concern that Victorian DBs (like all the other DBs and TNSPs) are using their capex programs as a method of dramatically increasing their profitability, which as noted in section 2.1, is based on a “gaming” approach implicit in the building block method.

**In their applications, all the Victorian DBs make significant reference to the age of their assets, and the EUCV points out that this same observation was made in 2004 as being a major justification for the capex program they wanted to implement. Despite their protestations about needing more capex than they were allowed, ESCV discounted their claimed capex (in aggregate) by ~13%, but actual over-run has been only 6%, indicating that the ESCV was correct in its aggressive approach<sup>7</sup>, although maybe a little too aggressive in hindsight.**

There has been much argument about benchmarking of performance as the basis for setting capex and opex needs. The most telling of all performance benchmarking is that provided by a business of itself, as every electricity transport business in Australia is of the view that its it different to all others and therefore comparative benchmarking is fraught.

The actual performance of the Victorian DBs relative to their stated needs clearly indicate:-

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<sup>7</sup> In its final decision, the ESCV assumed there would be a forecast 2.6% increase pa in peak demand. In fact the actual increase in peak demand for the current five year to end 2009 has been 5.5%, and this provides an indication why the DBs needed to use more capex than was allowed by the ESCV.

▪ **Growth in demand**

The amount of growth in the current period is much the same as expected for the new period, yet the amount of capex claimed for the new period grossly exceeds the amount of capex actually used in the current period by nearly \$2 billion, or an increase of 50% from the actual capex currently incurred (actual + forecast).

In the claim by the DBs to ESCV for capex in the current period, they argued that they needed a capex increase to address increased growth in demand. EUCV agrees that growth in demand is the main driver for capex. The growth in peak demand over the past 5 years has exceeded 5% pa but the ESCV based its capex allowance on an assumed 2.6% pa increase in peak demand<sup>8</sup> explaining why the allowed capex might have been understated.

So if the growth in the current period is higher than the forecast growth of 2.9% for the next period (see section 6 which details the EUCV analysis of forecast growth based on the DB forecasts) then the amount of capex for growth should be lower than in the current period, yet despite a fall in forecast growth in peak demand from over 5% to less than 3%, the DBs are seeking a 50% step increase in capex, of which the bulk is related to service the expected increase in growth.

**There is a basic inconsistency between the growth in peak demand falling from the current period to the new period, but there has been a claim for a capex increase of 50% to the next to address the lesser demand growth.**

It is accepted that over an entire network, there will be areas where the existing assets are considered to be at full capacity, and therefore any growth necessitates capex to increase the physical capacity. But on a statistical basis not all areas require upgrading at the same time. EUCV would expect on a statistical basis the same number of areas would require upgrade in the next period as did in the current period, especially as the forecast growth for the next period is less than occurred in the current period (see section 6).

Therefore if the Victorian DBs were able to manage their current capex to only overspend by a small amount in the current period, but still manage to cater for a peak demand growth in the current period, then the current levels of capex should be adequate for the next period.

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<sup>8</sup> See ESCV FD statement of reasons table 4.3 page 133, average of each DB forecast growth assumption

The EUCV has major concerns that the amount of capex required by Victorian DBs for the next period is not appropriate based on its current performance.

- **Escalation of costs**

Since the AER commenced operations under the AEMC revised chapter 6A rules and the MCE revised the chapter 6 following the same pattern, there has been an explosion of capex and opex increases being sought (and allowed) for increased capex and opex allowances to accommodate increases in capex (and opex) based on a view that the rate of increases in material and labor costs used by electricity transport businesses is higher than general inflation.

Regulation is expected to replicate the pressures of competition on a monopoly, yet regulation as applied by the AER is taking a view that any “real” increase in costs (ie where costs exceed the general inflation) is justification for an increased allowance to a regulated business.

Every regulatory review by the AER has allowed for a “real” cost increase in capex and opex because of this factor.

Yet, across the Australian market general inflation is seen to replicate cost increases on average. The one area where inflation is less than the long term average is in the cost of labour. In this regard, the differential between the average increases in labour, discounted by the general inflation, is seen as the overall increase in productivity of labour. Generally industry has its costs constrained by competition, and general inflation measures the downward pressure imposed by competition.

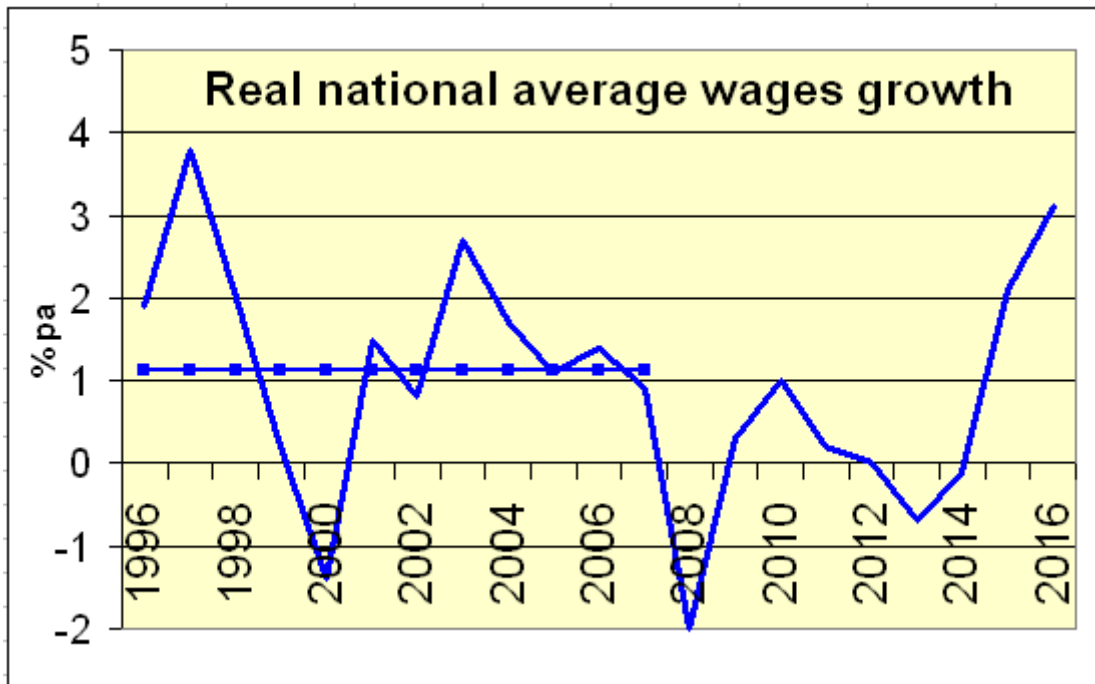
**The AER has been allowing electricity transport businesses not to be subject to this downward pressure by allowing the businesses “real” cost increases whereas other businesses have to operate within these cost pressures. The AER approach effectively excludes requiring any of the businesses to achieve any productivity improvements. Surely this is inconsistent with the objective of achieving efficient costs.**

## **2.3 Wages growth**

Much of the capex budget is in relation to construction cost, which is driven by construction wages and materials costs. Victorian DBs provide a view that capex should be inflated to allow for the movement in construction wages due to the need to allow future projects to remain within budget.. In fact there is an argument that construction wages are falling relative to

average wages (or to put it alternatively, that average wages are catching up construction wages).

In its March 2009 report to the AER<sup>9</sup>, Econtech points out that over the previous period the wages nationally have moved (on average) in the following way:



Source: Data from Econtech

This clearly shows that “real” wages were higher in the current period than is forecast for the next period and that the average wage growth nationally is 1.2% real – that is the naturally occurring inflation as measured by the CPI already incorporates an underlying real wages growth.

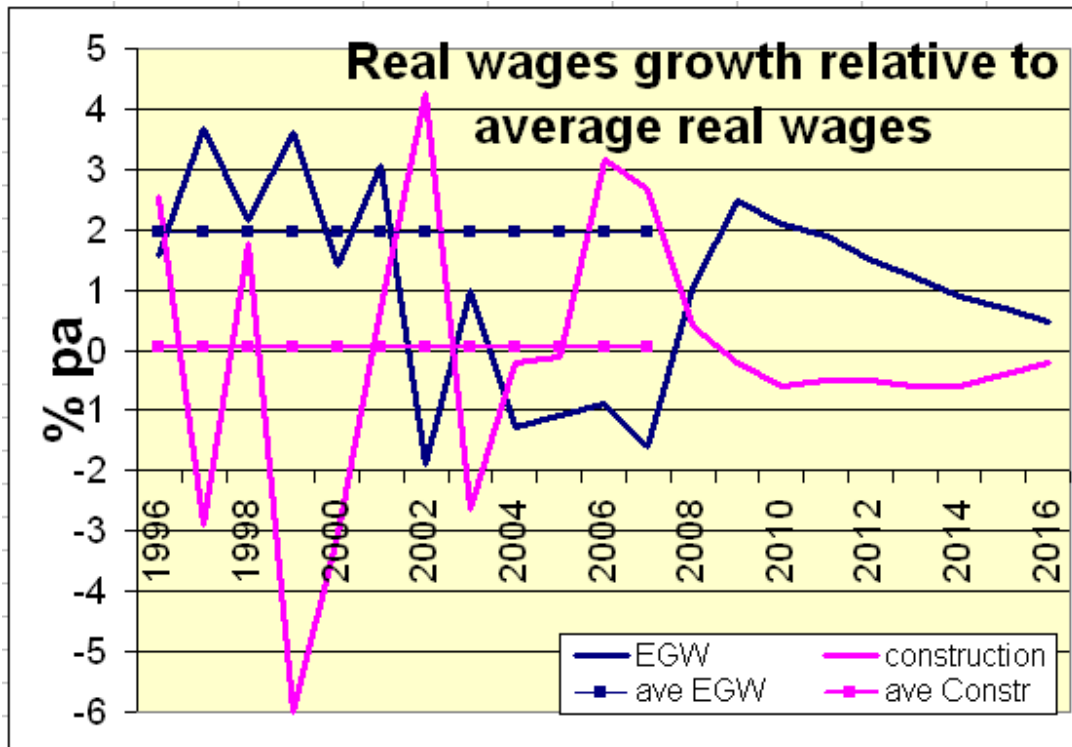
In this regard, it is pertinent to observe that Victorian DBs under-used its capex allowance in the early years of current period when wages were higher than is forecast for the next period.

The same report (in table B4) shows that:

- During the period 07/08 to 16/17, construction labour is likely to be less than the average of all industries, after being higher in the previous decades. On this basis after allowing for productivity improvements, Victorian DBs should be advising the AER that a discount should apply to capex labour.
- Historically the cost of EGW labour is higher than average wages and that for the 07/08 to 16/17 decade will be about the average of the

<sup>9</sup> KPMG/Econtech Updated Labour Cost Growth Forecasts 25 March 2009 table B4

past two decades, or less. This wages outperformance is a measure of the productivity of the sector.



Source: Econtech data

Overall, at most the AER should only allow for wages growth which is higher than the average for sector over the long term. To allow for the wages growth in excess of CPI, is forcing consumers to pay a premium and which does not recognise the benefits of productivity.

To a significant extent the review by Access Economics for the AER concerning the ETSA application<sup>10</sup> supports the EUCV contention.

Access Economics opines that EGW wages are likely to rise at a rate less than the Victorian state average (table 9.3). Accepting the state labour average change reflects the productivity gain for the state, then on the basis of these estimates, Access Economics is forecasting EGW wages to be less than the state productivity improvement.

<sup>10</sup> Report by Access Economics Pty Limited for the Australian Energy Regulator “Forecast growth in labour costs” 16 September 2009



Financial year changes in VIC real Labour Price aggregates

Annual % change	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
VIC	1.2	1.5	1.3	1.1	1.0	1.5	1.6	1.4	1.4	1.6
Utilities	1.9	1.4	0.9	0.9	1.1	1.6	1.7	1.4	1.3	1.5
Mining	2.5	2.0	0.8	1.1	1.3	2.1	2.2	1.7	1.4	1.4
Construction	2.0	3.5	0.5	0.4	0.4	1.5	1.9	1.0	0.7	1.5
Manufacturing	0.6	1.7	1.8	1.5	1.4	1.8	2.0	1.8	1.7	1.6

As the capex is predominantly contract labour (usually construction), analysis of the movements of Victorian construction labour against the state average, also replicates the observations of the EGW labour cost changes, in that the increased cost of construction labour, is expected to be less than the state wide productivity growth.

In its 2005 final decision the ESCV allowed in the capex and opex, for wages to increase by a nominal 5% against an expected inflation of 2.77% (page 277 of ESCV FD statement of reasons), allowing a real increase of 2.23% to be prorated across all categories. To some extent this increase has been shown to have some legitimacy as the table shows that wages for EGW and construction in the later years of the period, exceeded the state wide wages growth, and hence the improvement in state wide productivity.

The reverse also applies. Where the wage growth is less than the long term average, the AER should apply a discount to the forecast capex. If the ESCV allowed an increase for wages above inflation to reflect that EGW wages would grow faster than the average productivity of the state, then the AER should recognize that state productivity is estimated at more than the growth in EGW wages, and adjust the wages growth element in a negative direction.

There is clear evidence that there is no need at all to increase the allowance for capex to reflect rising construction and EGW wages growth as there is no demonstrable forecast that there is an overall increase in the average long term wages, and to allow any increase is to deny consumers the benefits of labour productivity – recognising that productivity growth is an outcome from the pressure of competition.

## 2.4 Material cost growth

The Victorian DBs should not be able to increase its capex for materials cost escalation for the next period without identifying the level of the materials cost elements implicit within the cost elements of the current period.

The purpose of the approach in the Rules to the capex (and opex) allowance is to identify step changes from one period to another. It is clear that assessments made by the AER in some previous reviews with regard to materials cost escalation was that the rate of increase of materials used by the businesses was seen in context of a rapidly increasing cost of supply of a number of materials during particularly in the years of 2006 and 2007

where the cost of material increased dramatically above the long term rate of change. Since that time the prices of materials have fallen significantly and are now much closer to long term averages.

Competitive pressure is intended to provide incentive to increase productivity and creative approaches to maintaining costs. For the AER to allow electricity network businesses an automatic right to increase allowances where costs are following a long term average runs counter to the concept of regulation being a surrogate for competition.

The concept of a regulated business having to justify a step change in order to acquire an additional allowance for capex and opex has been established in previous regulatory decisions. The AER applied this principle when materials costs were increasing in price much faster than the long term average, and the AER allowed increases to accommodate the cost of materials increasing faster than the long term average. Now that materials costs are falling in price (to levels akin to the long term average) there is no justification for the AER to allow increases as a result of a step change and a return to the basic premise that the CPI adjustments adequately cover the cost of materials should be applied now.

This approach replicates the outworkings of the change in the price of materials implicit in the ETSA attachment E.5 (SKM assessment of real weighted non-labour cost escalation rate table 1) where the overall impact of materials price movements is less than zero<sup>11</sup> for the years 2009 – 2014 which are the years that will impact this regulatory decision.

In its draft decision on the ETSA review, the AER examined each of the elements for material cost growth expected for the next five years (see appendix G3).

In principle, the EUCV does not support such an approach as proposed by the Victorian DBs, as it implies that the AER will forever be subject to having to forecast the movement in materials costs, rather than allowing for step changes when and if they occur. The tendency will be for the AER to take a conservative view on expected changes and therefore the businesses will be rewarded at the expense of consumers. For example, in the recent draft decision on the ETSA application the AER forecast the future movement of the \$A/\$US exchange rates. In the ETSA draft decision appendix G, the AER provides the following table of forecast exchange rates

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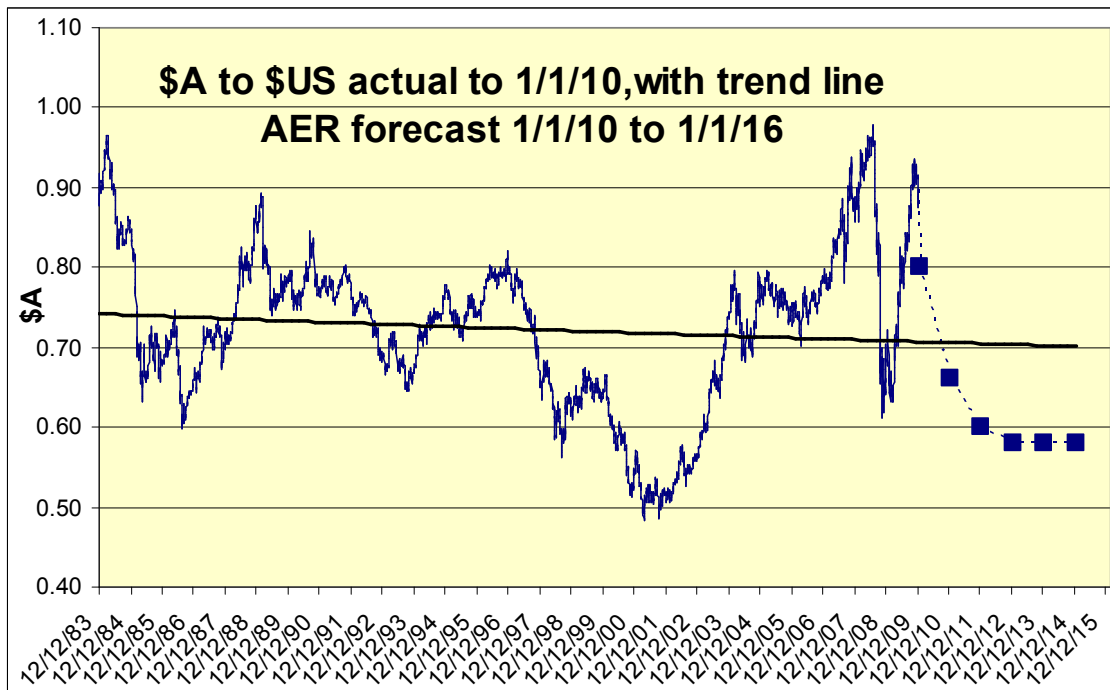
<sup>11</sup> The impact of the 12.2% fall in non labour costs in 2009, is not offset by the smaller increases in the following years

**Table G.8: AER conclusion on exchange rate forecasts for ETSA Utilities (USD/AUD)**

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Exchange rates	0.744	0.800	0.656	0.603	0.585	0.581	0.580

Source: AER analysis; Econtech, *ANSIO*, 20 August 2009 p. 110

This seems to indicate a very conservative forecast, when the entire period of floating exchange rates is reviewed. The following chart shows the historic exchange rates and the forecasts of the AER



Source: RBA, AER DD

For the expectation of the exchange rate for 09/10, the AER has forecast a value of \$A0.80. The average exchange rate up to early February (ie of more than seven months of data) shows that the actual current average exchange rate for 09/10 is \$A0.877. This shows that the current AER estimate is significantly conservative and should be revised. To have an average of 0.80 for this year would require the exchange rate to immediately plummet to 0.69 for the rest of this year. This is not an expectation of the market as a whole and is an unrealistic forecast.

The forecasts of the balance of the new regulatory period shows that the AER estimates are the lowest for the entire period of floating exchange rates except for a relatively short period from 2001 to 2002 where the exchange rate was lower than the AER forecasts for the next 5 years. Effectively, the AER forecast implies the \$A will have a more sustained period of low

exchange rates than has ever been experienced since the \$A was floated. Again, we would question this forecast.

The overall trend of \$A to \$US is that there has been a slow reduction of perhaps \$A0.04 over the entire period of floating exchange rates.

This conservatism in the exchange rates is significant as it flows to the price expectations for all of the price movements of the other materials the AER has estimated, as the prices of these materials are all quoted in \$US.

The fact that the AER has used a conservative approach to the exchange rate raises the concern that all other material forecast prices are equally conservative.

As noted earlier, the EUCV considers that the best regulatory approach for setting capex (and opex) is to follow the historical approach used by the business itself as the basis for setting future allowances, making adjustments only for defined step changes in the conditions which the business must work under.

The performance of the Victorian DBs over the past regulatory periods where there have not been allowances for increased material costs, shows that the DBs have consistently been able to absorb increases and decreases in materials prices within their capex allowances. The EUCV observes that other businesses must manage these price movements within a market that has price movements measured by the CPI. Therefore the EUCV considers the AER approach to allowing larger than CPI adjustments for material based on estimates, only further increases the risks consumers face under this regulatory process developed by the AER.

## **2.5 Early retirement of assets**

Depreciation is the allowance included in accounts to reflect the need to recover capital invested so that at the end of the life of the asset, the asset has no value in the financial accounts. The implication is that at the end of the life of an asset, the investment initially made is recovered in full, and that the business then has to invest in new equipment in order to continue its operations.

In a competitive environment, the price of an article produced is based on the short run marginal cost of production. The import of this is that the price used for sale does not recover the long run marginal cost, which includes for the depreciation of the assets used to create the product. It has been observed by many businesses that their recovery of depreciation is usually less than the actual investment made, and that this observation is predicated on the nominal value of depreciation as used by the ATO. In a regulated environment the "real" value of depreciation is incorporated into the building block, increasing the costs to consumers.

Bearing in mind that competition does not appear to allow businesses to in fact recover depreciation (either nominal or real values) the AER must be particularly aware of the potential to game the depreciation of regulated assets.

Consumers have noted that with a WACC higher than what the market as a whole achieves, there is a commercial driver for a regulated business to physically dispose of “written off” assets before their technical life may be over. This driver is unique to the building block approach to revenue setting in that a fully depreciated asset does not attract any return (WACC times zero is zero), whereas replacing a written off asset does attract a return. As opex is recovered at cost under the building block, the profits for a regulated business come only from the return on assets. In a competitive business, having written off an asset is seen as a positive if the asset is still used and useful as the costs for production are lower.

In the past, MEU and EUCV members have seen electricity supply authorities continue to use assets long after the asset has been written off financially, so the technical life of many assets is really longer than the average time used to financially depreciate the assets in the building block approach. Physical life of an asset is related to many more aspects than just time. Assets lightly used and well maintained will generally be useful longer than the expected asset life. The care used in manufacturing and the basic design parameters also greatly impact on asset longevity. One MEU members cites the example of where equipment built in the 1930s and an expected life of some 40 years, was still being used early in this decade.

**EUCV has a deep concern that assets still used and useful will be taken from service by DNSPs as the DNSPs no longer get any return for them, and replaced with new assets on which they do get a return. This provides an incentive to replace assets regardless of their continued usefulness, with consumers bearing the costs for early replacement.**

**The EUCV seeks advice from AER as to how the AER can ensure that used and useful assets are retained in service and not replaced unnecessarily.**

In its review of the five applications, the EUCV identified that each DB appeared to have a different depreciation schedule for the same asset class. This is unacceptable. In theory each asset will have the same regulatory life regardless of the owner, provided all owners apply best practice to maintain the asset, especially in Victoria which is geographically the smallest mainland state, and therefore there are only small differences in climatic conditions which might impact an asset life.

Further, the AER is expected to apply the Rules as if they were being applied to the notional DB, just as it does for many other aspects of the Rules, (eg WACC parameters).

As the new Rules permit DNSPs to introduce their own depreciation schedules, it is appropriate for the AER to implement some controls on the use of this freedom. When this freedom is combined with a WACC which incentivises new investments, it becomes essential that the AER addresses the controls on rates of depreciation.

The EUCV considers that the AER should set the same asset life to each asset class regardless of which DB owns the asset.

## **2.6 When should assets be replaced?**

As the ability of DNSPs to secure new sources of funds has been seen not to be a major issue, competitive businesses tend to have more challenges in raising new sources of funds. Because of this, competitive businesses consider that there has to be a strong financial justification to inject capital rather than continue to have higher opex. The approaches used to substantiate capital expenditure vary between companies but to justify capex, the opex savings must recover the capital required usually within 1½-3 years.

It is of concern to consumers that DNSPs do not use a financial model to justify replacement, relying more on time based approach supported by physical asset management approaches, such as condition monitoring. The EUCV agrees that physical asset management must be a standard tool for identifying when an asset requires replacement, but we also believe that such asset management must include for a financial tool to address the commercial need for asset replacement.

**The AER should require the DBs to incorporate a financial tool into their asset management programs to identify when it is commercially sensible to replace an asset, rather than use physical asset management alone.**

## **2.7 The capex claims and timing**

The Victorian DBs have provided lists of the new larger capital projects they intend to implement, and provide a justification of each. What has not been done is a risk assessment of the likely downside if some of these works are delayed. Such an analysis requires a series of estimates of the risk for increasing periods of delay. Until such an assessment is made and the risks analysed, the AER cannot approve any of these capex programs. The AER needs to put itself in the role of the directors of the business to ensure that the capex has been assessed properly in terms of the market impact.

It has been stated that this is a role for the actual directors of the business, and not the regulator. This is not so. Once the regulator has given approval for a capital project, the directors of the business know they are assured of receiving a guaranteed return on any investment they make, especially as any capex over-runs are automatically rolled into the RAB. This takes away from the directors of the business any of the risk for authorizing the capital expenditure.

The EUCV members very clearly understand the risks involved in authorizing capital projects – every member has this responsibility on a continuing basis. If the risk of achieving the forecast outcome is covered by a guaranteed return (bearing in mind that there is now no risk of future optimisation) the directors of the business have little risk in authorizing approval for a capital project. Thus the AER must accept that it has effectively the responsibility of ensuring that a capital project (both in terms of value and timing) is economically efficient. The Victorian DBs have not provided the AER with an adequate risk analysis to undertake this task.

This point is further developed in section 4.2 of this submission, along with the results of a KPMG survey commissioned by ESCoSA which highlights that generally SA consumers are unwilling to pay for increased reliability.

However, unless the AER carries out such a risk analysis, it will be not done. The jurisdiction has abrogated this role and the DBs do not need to carryout the role, leaving the responsibility entirely with the AER, who has the responsibility also of ensuring the revenue allowed is economically efficient, and at the same time effectively providing government with an undertaking that reliability and quality of supply will be maintained or even enhanced.

**The EUCV strongly recommends that the AER seek from the Victorian DBs a detailed risk analysis for each capital project, including an assessment for delays in implementation. With this data, the AER can assess whether it is absolutely necessary to be carried out during the next period or could be deferred with little risk until a time when costs for its implementation might be lower due to a reduction in capex demands from other electricity network businesses or when competition increases.**

## 2.8 Capex overall

The Victorian DBs (like the NSW, Queensland and SA DBs) have made a claim for a massive increase in its capex for the next period, increasing its current actual capex by some 50%. It has based this need for such a large amount of capex on four main aspects:-

1. Growth
2. Replacement
3. Increased security, reliability and safety

#### 4. Non-network and other

Based on the presumption that the current capex was adequate for the current period (and the Victorian DBs actually underspent its capex allowance for the first three years of the current period giving some credence to this presumption) then the only reasons for granting an increase in capex is that there have been step changes in the requirements for Victorian DBs to meet. In this regard:-

- Forecast growth (both in peak demand and consumption) is less than in the current period, implying there is no step change
- The Victorian DBs has not sustained an argument that it is subject to increased safety requirements (other than perhaps bushfire management) and therefore these costs should be much the same as in the current period
- Does the non-network expense result in a step change? The Victorian DBs allege that due to the increases in size (and this measure is open for debate), they need to spend more to manage this requirement.
- A significant amount of the capex is for equity raising costs. If the amount of increased equity required is less due to a less aggressive capex program, this reduction will result in a lower equity raising cost
- As noted in sections 2.3 and 2.4 above, there is no sustainable reason for the current capex allowance to be increased due to increased labour and materials costs. In fact, there is an argument that as Victorian DBs were able to accommodate the large increases in labour and materials costs seen in 2006 and 2007 and still manage to hold their capex to only a 6% over-run despite growth being nearly twice that expected, that there should be a discount applied (rather than an increase) to the capex budget.



### **3. Forecast Operating Expenditure**

The EUCV considers that, with such a significant increase in capex projects, Victorian DBs should be required to provide much larger efficiency savings in:

- Capex/opex trade-offs (i.e. larger opex savings)
- Productivity savings
- Savings from maintenance programs no longer required on replaced assets.

However, what is being seen, is a large step increase in opex as well as the large capex claim. It is implicitly alleged that all of the augmentation projects would result in increased opex, but opex only increases if the capex is for new “greenfields” augmentation. Increasing the size of existing hardware merely constitutes similar opex for new but larger assets.

There is an expectation, driven by the observation from past performance of electricity distribution businesses, that opex is relatively independent of both demand and consumption changes. That, in the current round of electricity distribution resets by the AER (NSW, Queensland and SA), all the DBs have claimed a massive trend upwards in opex needs appears to be counterintuitive with their historic actual performances. That this is the case is clearly demonstrated by the approach used by the ESCoV in its decision on the Victorian electricity distribution businesses in their analysis included in the draft and final decision in the 2005 Electricity distribution price review. Here, the ESCoV used the actual opex used and allowed the opex to be increased purely for identified step changes. ESCoSA used a similar approach in its review of ETSA Utilities. If the AER were to depart from this approach it would need to demonstrate why it has done so, as such a departure poses a significant regulatory risk for consumers.

Comparisons of actual opex compared to allowed opex for the vast majority of regulatory decisions show a typical trend of actual opex in the early years of the period featuring a discount to the allowed opex. With the approach of a new reset, the opex seems almost magically to increase and the forecast for the final year often shows a need in excess of the regulator’s allowance. In the case of the Victorian DBs, the massive under-run in opex versus the amounts allowed by the ESCV makes such an approach difficult, except in the case of Powercor.

The purpose of such a trend is clear – making savings in the early periods, allows the DB to retain all of the savings without risk of losing them in a new reset. Ramping up opex in the latter years provides the DB with the basis of an argument to claim a higher allowance in the new reset. This is regulatory gaming and the AER must be cognizant this aspect, and not allow it to justify opex increases.

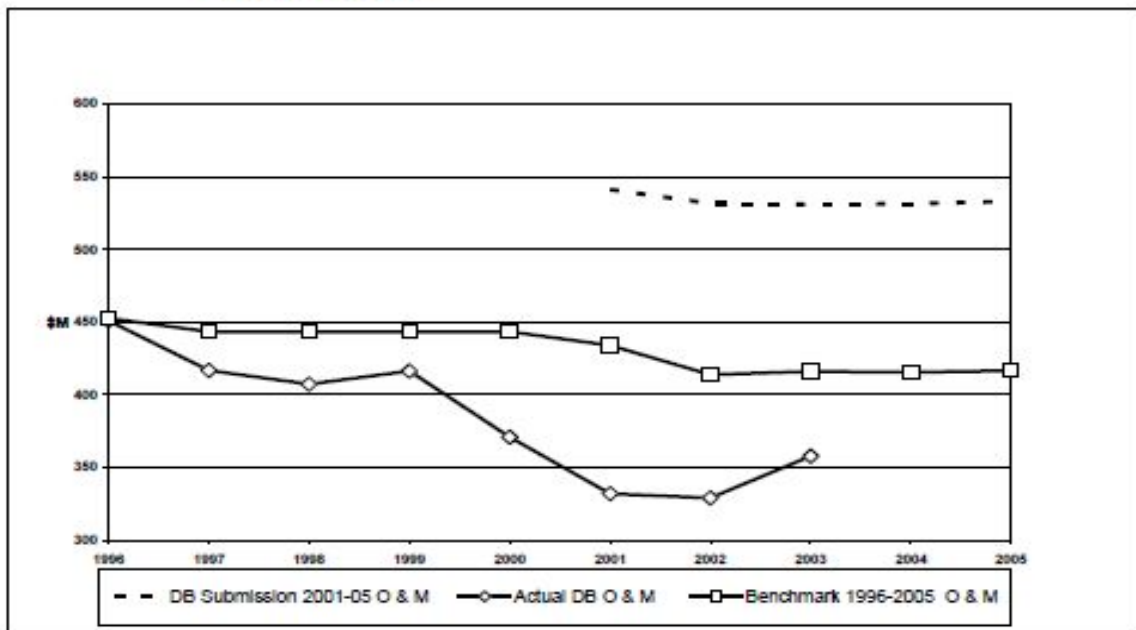
The introduction of the EBSS is intended to provide an incentive to reduce opex, but by the AER declaring that it will use the fourth year opex as the basis for the new period, still retains the incentive on the DB to follow the historic approach so obvious in previous regulatory reviews. The ESCV used this same approach in 2005 and the results are clear – the DBs were unable to use all the opex granted and secured significant benefits as a result of the large under-runs. The concern EUCV has with this approach is that there is an incentive on the firm to follow the same practice as has been seen in previous approaches. Because of this the EUCV has been a strong supporter of the opex over the previous period being averaged to provide the start point for the next period opex and allowing for step changes from that start point.

In the following analysis of Victorian DBs opex the EUCV shows a trend based on the 2008 actual opex, extrapolated by the forecast growth in demand. The EUCV does not necessarily consider that this approach is accurate, as it provides an indication only. In fact, EUCV considers that the growth in peak demand as the basis for setting opex will provide a significant overstatement of opex needs, as opex tends to be somewhat independent of demand growth.

### 3.1 The Victorian DBs opex claims

The following chart shows the ESCV analysis of the opex trends since deregulation and included in its March 2005 Position Paper for its Electricity Distribution Price Review 2006-10.

**Figure 1.2: Industry operating and maintenance expenditure — submission, actual and benchmarks**



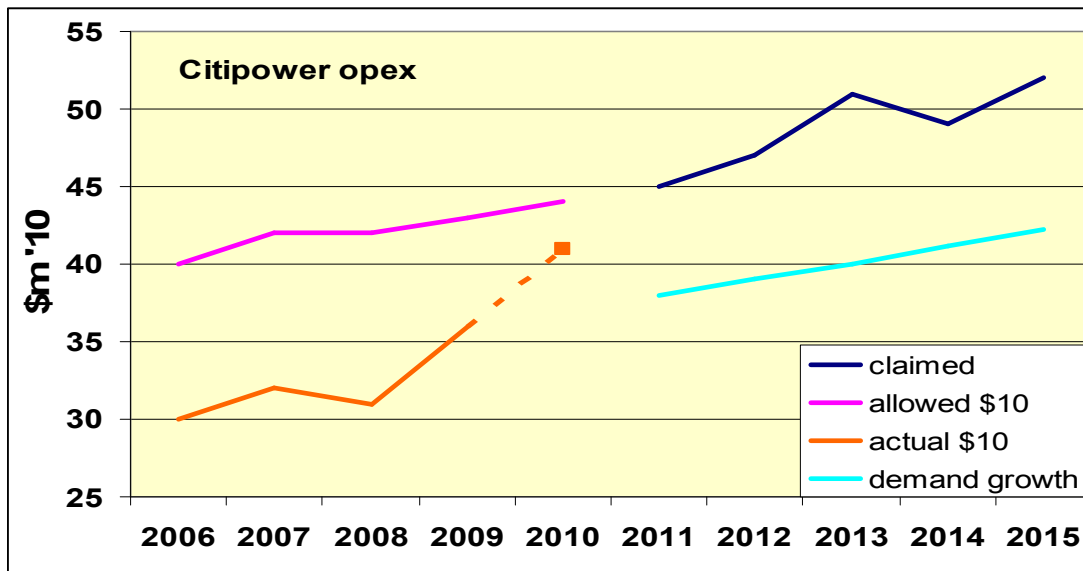
Source: ESCV

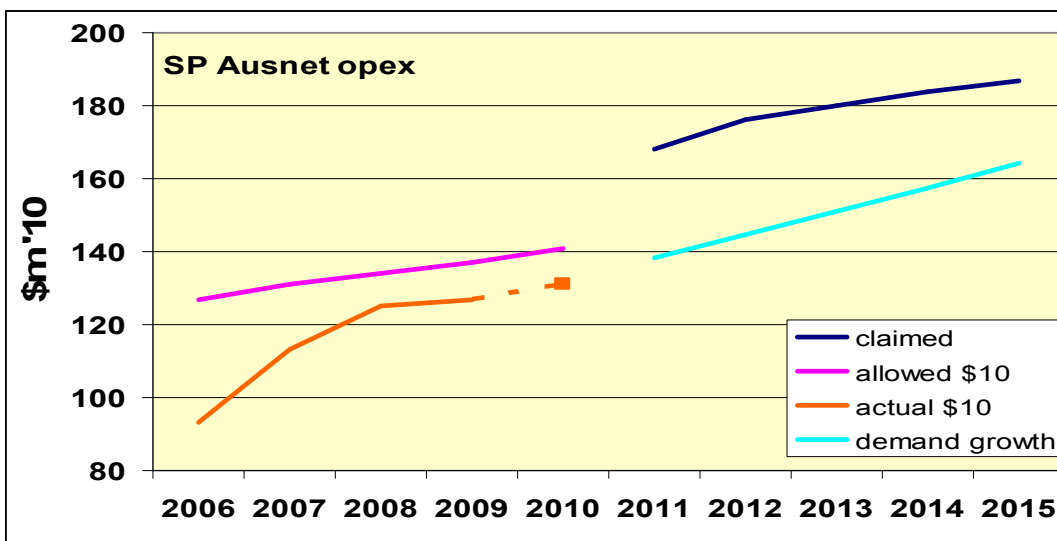
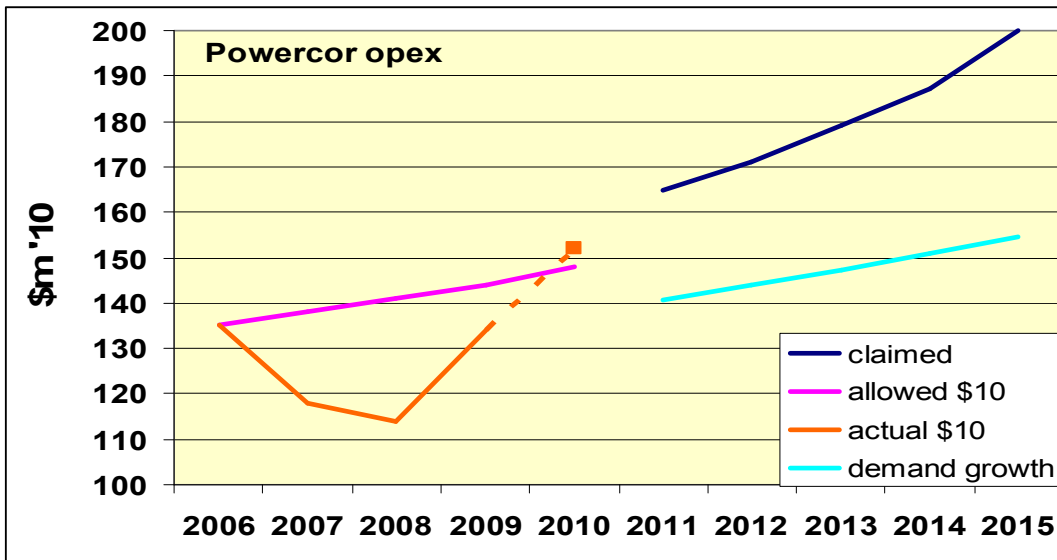
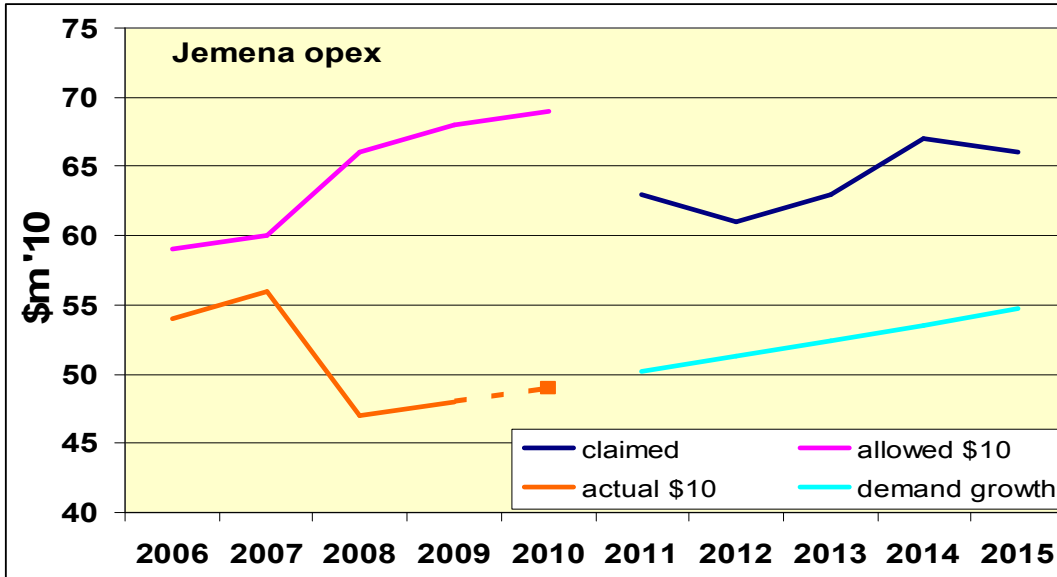
The chart shows that overall the DBs have consistently underspent on the allowances granted to them for opex, and that despite underspending the allowances, have claimed significantly more opex was needed than they actually used. This trend of DBs overclaiming opex needs and underspending compared to allowances was addressed by the ESCV review in 2005, and as a result the DBs were heavily constrained in what opex they could seek for the 2006-10 period.

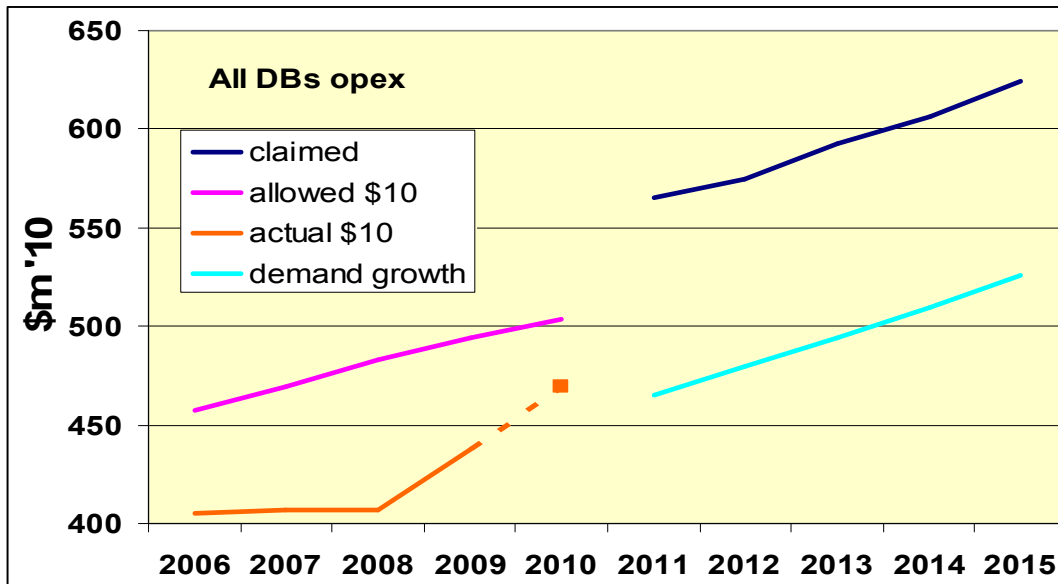
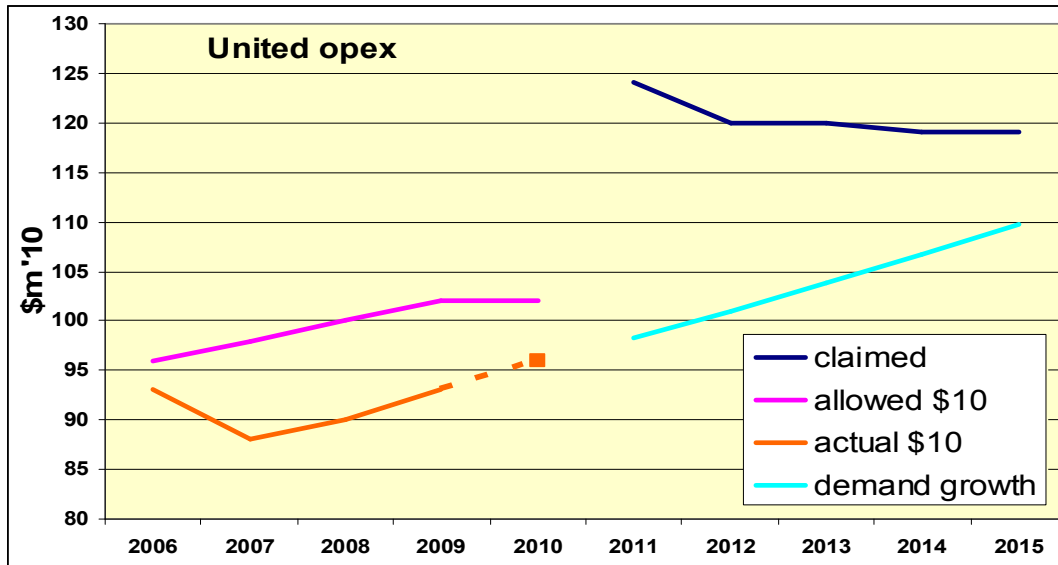
A review of the claims made by the DBs for opex and the ESCV allowances made in the 2006-10 period shows that the DBs tended to claim only slightly more than the ESCV finally granted in terms of opex, and as a result the following charts do not include the opex claimed by the DBs in 2005.

The following charts for each DB are based on data from the ESCV final decision in 2005, the DB recent applications and the opex trend based on the 2009 actual opex and the forecast increases in demand advised by each DB in its application. The charts show:

- The current period ESCV allowed opex,
- Actual opex as provided by the DBs in their applications with the last year (2010) shown as indicative,
- The opex forecast by the DBs as needed for the next period, and
- Opex growth trends based on the DBs forecasts of demand growth, using the actual opex for 2009 as the basis.







There are a number of common aspects that all of the applications demonstrate.

- All of the DBs underspent on the opex allowed and therefore garnered a significant saving benefit. The chart showing combined DBs provides an indication of the cost this underspend has had on Victorian consumers
- Each DB shows an increase in the actual opex for 2009 and a further increase is forecast for 2010, and this is typified in the chart of combined DBs.
- Each DB is forecasting a large step increase in opex needs for the next period, and generally a continuing upward trend over the period. This is more clearly seen in the chart combining all DBs

The EUCV has a real concern that Victorian DBs are attempting to game the system, the new Rules and the guidelines established by the AER. It is clear that they attempted to do likewise in 2000 but the ESCV limited this ability significantly. Unfortunately for Victorian consumers the ESCV was still “gamed” in 2005 as the DBs demonstrated that they required much less opex than the ESCV finally granted. In fact, the Victorian DBs have been allowed to collect over \$60m per annum in unspent opex in the first four years of the current period.

The EUCV considers that the AER has a responsibility to ensure that the Victorian DBs opex claims be fully justified and detailed, and that the AER insists on (and gains) supporting evidence of sensible reasons for allowing step changes which prove the need for opex above the ESCoSA estimate.

There is clear evidence that in the past Victorian DBs have grossly overstated their opex needs, and evidence of this is provided in the ESCV Position Paper issued in March 2005. With such “errors” in the past, it is clear that Victorian DBs appear to have had some difficulty in estimating their opex needs and as a result have been excessively conservative in developing their estimates for opex.

### 3.2 Benchmarking

Other consumer groups have raised with the AER the need to use benchmarks to set opex allowances. The EUCV has sympathy for this view as industry wide benchmarking is the only tool which provides a regulator with the tools to assess the principle behind incentive regulation – that of competition by comparison. Unless a monopoly is compared to another as a core requirement to assess the reasonableness of a monopoly’s claim, a regulator has little ability to impose the strictures of competition on the monopoly.

This principle of industry wide benchmarking is the driver behind the Total Factor productivity approach being championed by ESCV and the Victorian government.

However the EUCV recognizes that under the Chapter 6 Rules, the AER is constrained from using industry wide benchmarking as the primary tool for setting opex, as the Rules list a number of approaches that the AER must use. These include

1. Information provided by the NSP in an application
2. Information from submissions made in response to an application
3. AER analysis
4. Benchmark data incurred by an efficient NSP
5. Actual opex incurred during any preceding period
6. Relative prices of opex and capex inputs

7. Substitution between opex and capex
8. Opex and capex labour should reflect a STPIS
9. Ensuring opex claims from a provider reflect arm's length terms
10. Whether non network options have been considered.

Of these, in relation to setting the opex allowance, aspects 1, 2, 3, 4, 5, and 8 have the greatest impact on setting efficient opex, and these are addressed in more detail below.

### **3.2.1 DB provided information**

Information from DBs in their applications would be such that they would seek to maximize their profitability by over claiming on opex needs. A DB has an incentive to overstate its needs and this reality needs to be recognized. The work by the ESCV and provided in its Position Paper shows that the Victorian DBs have consistently overstated their opex needs in the past, and this must cast doubt on the veracity of the claims being made now.

### **3.2.2 Submissions**

Submissions to the AER are effectively of two types – those from other NSPs which would be expected to support increases in opex allowances so they benefit from future AER reviews of their activities, and those of consumers who pay for the services and have a view of the relative cost for the service and the quality of the service provided.

The EUCV considers that due to the clear commercial interest other NSPs have in relation to supporting increases in opex allowances, the AER should give very qualified regard to such observations.

It would be expected that those paying for the service would recognize the need to balance between quality of service and the cost for the service. Historically consumers have tended to use past performance (past costs and past quality of service) as the best guide to balancing these competing aspects and developing a view on opex.

If the historic quality of service is at a level acceptable to consumers then the actual costs of providing a service to that level must gain significant primacy in regard to what constitutes an acceptable level of opex.

### **3.2.3 AER analysis**

The AER relies on technical support to assess the reasonableness of an opex claim. This support is usually provided by engineering consultants who must be considered to be compromised to some degree as they are also directly employed, at different times, by NSPs. Consumers employ such consultants for similar activities very occasionally, if at all.

The EUCV is not attempting to impugn the integrity of any engineering consultant but the reality must be stated. As a result consumers are concerned that the technical advice provided to the AER for its analysis might not be as rigorous as it could be.

### **3.2.4 Benchmark analysis**

Benchmarking is a core element of the implicit requirement of regulation – that of competition by comparison. The Rules require benchmarking (ie competition by comparison) to be against an efficient NSP. A major issue this then produces, is at what point is an NSP considered to be efficient and therefore able to be used as a benchmark.

In Australia there is only a small reservoir of independent but similar businesses that the AER can benchmark against. In the case of DNSPs, there are only 12 separate DNSPs in the NEM, and two outside it. Of the 12, five are in the smallest region in the NEM (implying there is in fact a smaller reservoir of independent DBs than the numbers indicate).

Each of the DBs alleges that it is different to all the others, and comparisons are difficult to make. For example to compare Citipower in Victoria (with only a CBD and a dense urban population) to Ergon Energy which is a vast DB with some low urban population and a sparsely populated rural population, is facile. In fact there are almost no DNSPs in the NEM which have similar characteristics and therefore allow reasonable comparison.

Notwithstanding this, the total Factor Productivity (TFP) approach used to some extent in the Northern Territory and proposed as an alternative in the NEM, attempts to use a wide range of elements where some degree comparison might be possible.

The EUCV considers that benchmark analysis has a role to play in setting opex allowances, but it has some drawbacks – such as the lack of a large number of similar businesses, and the approach taken by DBs that they provide only those benchmarks where their business appears to perform well.

The most important drawback is that of setting what benchmarks will be used – number of customers, line length, energy consumption and maximum demand – and the weighting given to each. The most recently used benchmark is “size” which is a combination of all the above benchmark elements, with others added, such as geographic area of the business, density of customers and power used, etc. As with the other benchmarks, the key aspect is the weighting applied to each element, and establishing this weighting creates major issues,



especially when comparing such different businesses as Citipower and Ergon.

### **3.2.5 Past performance (point 5) an impact of STPIS (point 8)**

The most powerful form of benchmarking is assessing past actual performance and using the inputs and outputs generated by a monopoly itself, especially when it has been incentivised by a STPIS of some form (a separate requirement, and included in point 8 of those assessments the Rules require AER to consider)

In regard to the Victorian DBs, they have been subject to a STPIS of some form for the past two regulatory periods (2001-05 and 2006-10) and therefore the outcomes of this are reflected in the actual opex incurred by the DBs.

The ESCV deliberately decided to implement its form of STPIS so that it was able to use self benchmarking as its primary tool for assessing opex. It then used the self benchmarking for the 2005 review and there was every expectation that self benchmarking would be used for setting future opex allowances.

As the ESCV knowingly allowed significant increases in opex in its 2000 review as part of implementing its STPIS, it would be inappropriate for the AER to not place primacy on self benchmarking for setting future opex for the Victorian DBs

The efficacy of the STPIS implemented by the ESCV has resulted in significant opex savings to Victorian consumers as the ESCV position Paper clearly demonstrates up to 2004. The AER assessment of opex used during the current period, again highlights that the Victorian DBs do not require the levels of opex granted to them in previous periods where a STPIS applied.

### **3.2.6 Assessment of the Rules requirements**

The EUCV considers that self benchmarking coupled with the application of the STPIS for the last decade, should allow the AER to use self benchmarking as its primary tool for setting opex and to have complied with the requirements of the Rules.

## **3.3 The relationship between capex and opex**

There is general agreement that there is a relationship between capex and opex, and the AER consultants and even some of the DBs have observed this. With the increase in capex for refurbishment, there must be a proportionate reduction in opex, as this is what justifies the replacement of old assets with new assets. Notwithstanding this inverse relationship, Victorian DBs proposes to increase its opex from current levels.

Where there is growth in a network there is an expectation that there would be additional opex attributable for new capex, but where capex is about replacing old assets with new, or replacing old with something new but larger, there is little justification for added opex.

The AER must recognise the inter-relationship between capex and opex, as far as the Victorian DBs application is concerned. It is a fundamental matter for any business that much of its capital it invests should result in a reduction in opex. The other reason for capex is to match increasing demand for products.

Victorian DBs has claimed an increase in capex, in part, due to escalation of costs. If this is the case than the commercial relationship between capex and opex becomes even more important. If the cost to replace the assets increases, then from a consumer viewpoint it is more economically efficient for the opex to be maintained rather than pay a higher cost as a result of new assets replacing old (*ceteris paribus*).

In section 2 above, it is pointed out that there is a commercial driver for Victorian DBs to replace assets rather than continue with incurring opex. It is the building block approach which provides this driver, as opex is recovered at cost, whereas assets achieve a return which provides the profits for the regulated business.

The AER must ensure that the capex used does result in opex being proportionately reduced.

### **3.4 Forecasts of higher wages costs**

Victorian DBs have been guided in the development of their applications by the recent AER decisions for SP AusNet in Victoria, Transend in Tasmania, ElectraNet in SA and the NSW DBs, and draft decisions on ETSA Utilities, Ergon and Eneregex. In all of these decisions the applicants have claimed that opex costs have shown a massive upward forecast trend in recent times, and the AER has accepted that some of the claims are justified.

As Major Energy Users affiliates involved in those reviews pointed out in their submissions, the actuality of the growth trends proposed to the AER provides little justification of such large increases. Whilst there may have been some justification at the time the AER decisions were made, that labour costs showed considerable upward pressure, the impacts of the global economic downturn are much clearer now. With unemployment nationally having risen (and probably now peaked), wage pressures are significantly reduced.

This issue is addressed more fully in section 2.3 in the capex section of this response, and the work provided there indicates that average wage growth in Australia has been relatively static since the start of the current decade.

In its report earlier this year to the AER<sup>12</sup>, KPMG/Econtech points out that over the previous period the wages nationally in selected industries have moved (on average in the following way:

**Table 2.3**  
**National Average Real Wage Growth (% pa)**

	Mining	Electricity Gas and Water	Construction	All Industries
1987/88 to 1997/98	2.5	2.3	1.0	0.8
1997/98 to 2007/08	1.3	1.5	1.2	1.1
2009/10 to 2013/14	1.5	1.8	-0.4	0.1
2007/08 to 2016/17	1.6	1.8	0.1	0.4

Source: LCM

This data implies that the labour cost growth in the EGW exceeded average labour cost growth in all industries by some 60 basis points for the period 1998 to 2008 – the same period for which the DBs have been corporatized. Econtech opines that for the next eight years EGW wages growth will exceed the average by 140 basis points.

In contrast Access Economics in its report for the AER in response to the ETSA review<sup>13</sup>, opines that EGW wages are likely to rise at a rate less than the Victorian state average (table 9.3). Accepting the state labour average change reflects the productivity gain for the state, then on these estimates, Access Economics is forecasting EGW wages to be less than the state productivity improvement.

Financial year changes in VIC real Labour Price aggregates

Annual % change	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
VIC	1.2	1.5	1.3	1.1	1.0	1.5	1.6	1.4	1.4	1.6
Utilities	1.9	1.4	0.9	0.9	1.1	1.6	1.7	1.4	1.3	1.5
Mining	2.5	2.0	0.8	1.1	1.3	2.1	2.2	1.7	1.4	1.4
Construction	2.0	3.5	0.5	0.4	0.4	1.5	1.9	1.0	0.7	1.5
Manufacturing	0.6	1.7	1.8	1.5	1.4	1.8	2.0	1.8	1.7	1.6

As opex is a mix of directly employed labour and contract labour (usually construction), analysis of the movements of Victorian construction labour against the state average, also replicates the observations of the EGW labour cost changes, in that the increased cost of labour, is less than the state wide productivity growth.

In its 2005 final decision the ESCV allowed in the capex and opex, for wages to increase by a nominal 5% against an expected inflation of 2.77%

<sup>12</sup> KPMG/Econtech Updated Labour Cost Growth Forecasts 25 March 2009, prepared for the Australian Energy Regulator

<sup>13</sup> Report by Access Economics Pty Limited for the Australian Energy Regulator “Forecast growth in labour costs” 16 September 2009

(page 277 of ESCV FD statement of reasons), allowing a real increase of 2.23% to be prorated across all categories. To some extent this increase has been shown to have some legitimacy as the table shows that wages for EGW and construction in the later years of the period, exceeded the state wide wages growth, and hence the improvement in state wide productivity.

The reverse also applies. Where the wage growth is less than the long term average, the AER should apply a discount to the forecast opex. If the ESCV allowed an increase for EGW wages above inflation to reflect that EGW wages would grow faster than the average productivity of the state, then the AER should recognize that state productivity is estimated at more than the growth in EGW wages, and adjust the wages growth element in a negative direction.

What the ESCV overlooked in its opex assessment was that there is an overall real long term growth in average wages of some 1-1.5% pa which results in general productivity improvements. The ESCV made a productivity adjustment of 0.83% (see page 210 of the ESCV FD statement of reasons) thereby understating the long term productivity that competitive industry must match.

However a review of the actual opex used by the DBs shows that they consistently under-run the allowance granted by the ESCV, indicating there is still extensive productivity savings available within the DB needs for opex.

This means that the AER must carry out two evaluations of the opex claims in relation to:

- An allowance for long term productivity gains
- An allowance for higher real wages costs

Based on these two assessments the AER can calculate any adjustment in real EGW wages for opex (and capex) which reflects the difference between the CPI and EGW wages (ie real EGW wages growth, and to discount this amount by the real average wages growth (or national productivity) applying across all businesses. This was the approach used by ESCV in its last decision.

This approach reflects a form of wages benchmarking to incorporate the national productivity change into the allowance granted for opex.

### **3.5 Identified step changes**

In the 2005 review, the ESCV took a detailed (alleged as aggressive by the DBs) review of step changes that occurred between the 2001-2005 period and what would apply in the 2006-2010 period. The ESCV used a benchmark opex from the 2001-2005 period and then assessed in detail each claim made by the DBs as step changes (see section 6.2.5 of the

ESCV FD statement of reasons). The original 24 “step changes (totaling some \$324m was reduced by nearly 60% to \$137m. Of the 24 aspects claimed to be step changes the ESCV rejected in total some 8 of the items and heavily discounted the allowances for many others.

Despite the “axing” of such a large proportion of the “step change” claims, the DBs were still able to under-run on their opex allowances. This clearly indicates the (quite understandable) ambit nature of the claims by the DBs in regulatory reviews.

However, of the step changes identified, one is consistent across all DBs – that of bushfire impacted costs. Whilst Powercor and SP Ausnet were most impacted by bushfires in 2009 (especially those of February 7), both AGL and United have indicated their risk profile has changed and even Citipower with its CBD and close urban area has claimed an impact.

The EUCV recognizes that the bushfires have had a major impact on the two rural DBs and probably United as well. The bushfire impact on Jemena and Citipower is much less than on the other DBs. The AER should examine in detail the extent of bushfire impacts on each of the DBs, and the extent to which the DBs may have contributed to the costs they incurred and are likely to incur as a result of the bushfires.

Significant cost claims have been made as a result of the bushfires – both in direct costs (eg increased inspections, clearing, etc) and in indirect costs (eg insurance costs, claims from impacted electricity users, etc). There is potential for the DBs to deliberately over-emphasize these costs, and the AER should be rigorous in their assessments of such claims.

Particularly, the EUCV sees that DBs actually affected by the bushfires of February 2009, may have contributed to the costs they ultimately incurred due to poor operation and maintenance practices prior to the fires. The AER should ensure that the under-expenditure in opex during the current period was not a contributor to the severity of the impacts on the DBs as a result of the bushfires. For example, if poor inspection practices of cross arms and insulators on wood pole lines contributed to the severity of the impact of the DB, then it is hardly appropriate that consumers should pay the DB a bonus for under-run on opex under the STPIS, and then pay an increased amount in opex resulting from the impact that may have been caused by the poor practices.

Victorian electricity consumers expect that the AER will be just as rigorous in this review as the ESCV was in its last review.

### 3.6 Scale escalation causing increased opex

In its application (page 163), Citipower provides a graphical representation of the reasons to increase its opex. The other DBs provide similar approaches, but the sources of the opex increases are common.

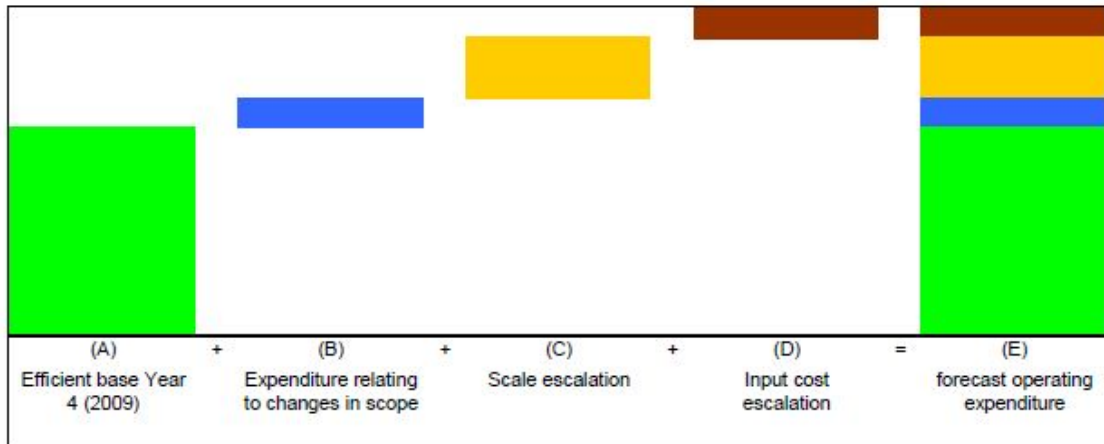


Figure 6-1: Operating expenditure forecast methodology

Citipower cites the reasons for increased opex are changes in scope (step changes), scale escalation and input cost escalation.

The issue of step changes is discussed above in section 3.5 and the aspect of input cost escalation is addressed partly above in section 3.4 and in section 2 on capex.

The aspect of scale escalation is a vexed one. As noted in section 3.3, there are a number of reasons why opex might increase (where there are more assets being cared for) and decrease as a result of capex where exchanges old assets with a great need for opex are replaced with new which need little opex. Unfortunately the AER and its consultants have tended to use a variety of scaling factors (eg increased consumption, increased customer numbers, increased demand, increase in geographical area served, increased RAB, etc) without examining the actuality of the impacts each of these increases might have on opex.

#### **Increase in consumption**

Consumption might increase for many reasons – larger area and new customers (all reasons to increase opex) or it might increase purely because consumers already connected have increased their usage due to pool pumps or larger A/C units (all reasons why opex would not increase). Therefore without examining the actuality of the increase in consumption, using this as a tool to justify an increase in opex is fraught.

The ESCV raised this issue of “growth” in its EDPR 2005 Position Paper (pages 49,50) where is stated

“Although not a ‘step’ change, growth forecasts are central to the projections of expenditure as well as expected revenue. The growth adjustment reflects the costs forecast to be incurred by servicing additional customers. The growth adjustment proposed by each of the distributors is summarised in Table 3.4.”

Table 3.4: Proposed growth rate for operating and maintenance expenditure, all distributors

Distributor	Proposed growth rate	Basis of growth rate
AGLE	\$12.76	Marginal cost per customer
CitiPower	\$14.07	Marginal cost per customer
Powercor	\$12.10	Marginal cost per customer
TXU	\$24.00	Average cost per customer
United Energy	\$7.74-10.02	Marginal cost per customer

The ESCV certainly considered that growth was only related to numbers of new customers and that these would be serviced “at the margin” only and not on a full cost basis.

To overcome this, the AER needs to “drill down” deeply to identify what has caused the increase in consumption and if these result in more opex.

**Increased customer numbers**

If the new customers extend the geographical area serviced, then it is likely that the increase will result in more opex. If, however, the increased number result from increasing density of customers (eg if a house is pulled down and replaced with units) then the increase in opex is marginal at most.

Thus the AER needs to assess whether the increase in numbers has had a major or a minor impact on opex due to the actual cause of the increase.

**Increased demand**

Increased demand could be caused from extending the network. Equally it could be managed by increasing the size of hardware in a substation.

If the increased demand has resulted from extending the network, there are new assets to be cared for and new power lines to be

managed. In this case, the increased demand will cause an increase in opex.

If the increased demand is purely managed by increasing assets sizes in an existing network (especially if the old undersized assets are replaced by larger but new assets) then the increase in demand has had little impact on opex required, and may even reduce it if the old assets are replaced with new, where there is an expectation that opex would reduce.

#### **Increase in geographical area**

There is little doubt, as noted above, if the area served by customers has increased, new assets will be required to serve these previously unserved areas, and opex would increase.

#### **Increase in RAB**

An increase in RAB is often cited as a reason to increase opex, because the implication is that the RAB has increased due to a general increase in “scope”. In fact RAB is increased due to capex, and as discussed above and in section 3.3, some capex could be related to extending the network, or it could be the replacement of old assets (fully depreciated and therefore having no value in the RAB) with new which would have the full replacement value included in the RAB.

Again, as noted earlier increases in the RAB could be caused by a number of different actions by a DB and therefore could well distort any high level assessment of opex.

The AER therefore needs to assess what has caused a change in each parameter if it is to truly assess a claim for an increase in opex due to a scope change.

### **3.7 The implication of a price cap approach**

In addition to the foregoing, the AER also needs to assess the impact of the regulatory approach used in a price reset. All TNSPs and some DNSPs have their revenue assessed on a revenue cap basis. In these cases, revenue is set for the entire regulatory period and **prices for services** are adjusted on an annual basis to vary with actual changes in consumption and demand. In the revenue setting at each review, the AER assesses the expected changes in consumption and demand and sets the allowed revenue to reflect the expected revenue needs of each business for the entire period. The allowance for opex might vary from year to year, but it is set to reflect the expectation of each parameter year on year, and remains set for the regulatory period.



Under a revenue cap approach, even if consumption and demand increase by more than was expected, the NSP receives no additional revenue (including opex) to reflect that the conditions have changed from those forecast at the time of the reset.

In a price cap environment, there is a significant difference. As with the revenue cap approach, the AER will set the allowed revenue for each year based on an assumed set of consumption and demand figures. Using the revenue calculated and the expected consumption and demand figures, the NSP develops a set of prices, which under the Rules the AER must ensure are cost reflective (or are as near to reasonable as is possible).

If the actual consumption and/or demand values vary from those assumed in developing the allowed revenue and prices, then the NSP either gains or loses revenue from that assessed by the AER.

As the ESCV states in its Position Paper issued for the EDPR in 2005 (page 22)

“It is well recognised that one problem with CPI-X price cap regulation using a building blocks methodology is that the resetting of price caps necessitates an analysis of forward-looking expenditure and revenue ... In resetting price caps, however, the task is complicated significantly by the strong incentive on the part of the distributors to ‘talk up’ future expenditure, and ‘talk down’ future revenue.”

In the same Position Paper the ESCV shows in figures 1.4 and 1.5 exactly that a small increase in consumption is partly to blame for the very large increase in revenue the Victorian DBs received. In explanation, on page 11, the ESCV clarifies its view of these two figures where it states

“*tariff revenue* for the 2001-03 period exceeded the benchmark level by 7.3 per cent, due to a combination of distributed energy being higher than forecast and the restructuring of tariffs in a manner that caused revenue to be higher than forecast for any given volume growth, for example, by increasing the variable component of charges by a greater amount than the fixed component.”

This clearly identifies that the ESCV sees that increased consumption under the price cap approach is expected to reward the NSP with increased [tariff] revenue. As many of the DB tariff structures also are demand based, the increased [tariff] revenue comes from increased demand and consumption.

If revenue is expected to increase with increased demand and consumption (as the ESCV expects) under the price cap approach used for NSPs, then the clear import is that any increased opex needed to accommodate that growth is recovered in the increased revenue. That concurrently with the

increased revenue achieved through increased growth in demand and/or consumption the Victorian DBs not only maintained their expected opex, but in fact used less opex than was forecast, there is a clear expectation that the increased revenue should be more than sufficient to manage the marginally increased opex that might result from the growth in demand and/or consumption.

The EUCV considers that the AER must not award such large increases in opex allowances to reflect expected increases consumption and/or demand, as the price cap approach already provides an attractive incentive to the DBs to minimise expected consumption growth. As the ESCV states succinctly, these increases need to be costed “at the margin” and the DBs have already demonstrated that they can massively increase their revenue because of consumption growth, but use less opex than allowed, to manage the increased growth.

### **3.8 UED new business model**

In its application United Energy states that it has carried out a review of its business model. The outcome of this new business model will be a larger increase in opex for the early years than would be the case under a “business as usual” approach.

The EUCV has significant concerns with paying a premium in opex so that a DB might deliver an improvement in its expenditure. Such an approach puts the entire risk of the success of such an approach with consumers.

The whole principle of using a STPIS to encourage improved opex performance is that it incentivises the DB to implement such improvements at its risk, and for taking this risk, it is rewarded by being allowed to keep any benefits generated within a regulatory period and by being allowed a share of the benefits into the next regulatory period.

**On this basis the AER should reject including the UED proposal into the regulatory allowances, and encourage UED to implement the changes so UED can demonstrate the benefits at the next review.**

### **3.9 Related party transactions**

A major risk for consumers is that a DB uses its related parties to provide some of the services required in the provision of services. Whilst not attempting to impugn the integrity of any of the Victorian DBs, it must be noted that awarding contracts to related parties has the potential to allow a DB to effectively increase its overall profitability.

Related party contracts can have two basic forms – the provision of services by a major shareholder (eg in the case of SP Ausnet some management services are provided by its major shareholder Singapore Power), and by

the provision of another division of the DB (eg in the case of Jemena Electricity Networks (Vic), by its affiliate Jemena Asset Management).

The ESCV had a concern that related party contracts might act to the detriment of consumers. In their EDPR Position Paper (page 26) the ESCV comments:

“Where related party contracts have not been appropriately market-tested and the regulatory accounting statements fail to disclose the actual costs incurred in providing the service, the distributor is in a position to simply disclose the value of the related party contract, which may bear no resemblance to the actual costs incurred in providing the service. For example, transfer pricing of this kind may result in the value of the contract being significantly more than the costs incurred. It thereby enables the distributor to retain any resulting efficiency gains or revenue from transfer pricing within the related party, rather than regulated prices based on efficient costs, and prevents any efficiency gains being passed through to customers over time through the efficiency carryover mechanism, as envisaged by the regulatory framework.”

The EUCV shares these concerns.

In principle the EUCV recognizes that using related parties for the provision of services may have a beneficial impact on the costs of the services provided. Equally, the closer the relationship and the less there is comparative pricing for the services provided by the affiliate, the great risk to consumers that the contracting of these services to affiliates.

All of the five DBs propose contracting some of their work to related parties – UED and Jemena to Jemena Asset Management (formerly Agility), Citipower and Powercor to parties related through their common ownership within the Cheung Kong group.

Each of the DBs has attempted to demonstrate that these related party contracts are either established at “arms length” or reflect commercial competitive costs. The EUCV has no data which either supports the DB’s contentions or disproves them, but there remains a residual concern that the arrangements are structured to increase the overall profitability of the major shareholders.

Powercor and Citipower both advise that they had a relationship with a business which has recently been sold out of the holding group. There is still a concern that the sale might retain some benefit that accrues to the holding group.

**The AER must rigorously investigate the claims made by the DBs in relation to the related party contracts to ensure they do in fact reflect a competitive outcome.**

### **3.10 Self insurance costs**

In its detailed assessment of increases in opex for self insurance, the AER took a firm line in its review of the ETSA Utilities claims for increased costs. The EUCV supports this and considers the AER should take a similar approach in its assessments of the Victorian DB applications.

### **3.11 Summary of the EUCV view on Victorian DBs opex**

Victorian DBs have requested a large 30% increase in the allowed opex budget based on the actual 2008 accounts. The 2008 “base year” opex shows an 8% increase from the average of the first three year actual opex for the period, implying that the base year opex is an inflated amount.

They allege that this is needed for a variety of reasons, ranging from a need to accommodate the growth of the network through to escalators needed due to the size of the network.

The EUCV is of the view that self benchmarking is the most effective approach to setting a reasonable opex budget. Victorian DBs have clearly demonstrated that the current budgets allowed by ESCV are not only reasonable but in fact could be seen as extremely conservative and therefore allowed Victorian DBs to accrue a considerable benefit from under-running the budget for much of the current period. This point must not be overlooked by the AER.

Victorian DBs built most of their claim for an increased opex budget using approaches that the AER had allowed in its decision on other DNSPs and TNSPs. What was not explained by Victorian DBs was that many of the reasons the AER allowed the TNSPs to claim these increases in costs arise because of the revenue approach applying – a revenue price cap. Victorian DBs are subject to a revenue based on a price cap approach which reimburses them for increases in demand and consumption. On this point alone, much of the argument presented by Victorian DBs for increases in opex is invalid. The AER must recognise this difference.

Victorian DBs also argue that its benchmark opex (ie that for year 2008 was impacted by exogenous factors and as a result saw the Victorian DBs opex increase from the previous year by 8%. The EUCV recognises the benefit to the DBs of spiking the 2008 costs by these so called exogenous events, and as a result the EUCV has long been a supporter of using average opex over the entire current period as the basis for setting the benchmark. If such an approach was used, then the benchmark would be even lower than the 2008 year by 6% as Victorian DBs were able to significantly under-run their allowed opex for many years prior to the base year (and many years before), and was

allowed to keep the benefit of this under-run. The AER must recognize this common aspect of regulatory gaming by regulated networks.

Victorian DBs provide reasons for needing to increase its opex due to a number of step changes between the current period and the future. On closer examination, many of the step changes noted are not real step changes and should be excluded by the AER.

## **4. Service Performance Targets**

### **4.1 Overview**

The principle behind assessing performance is that service performance is the reverse of the regulatory bargain, with payments being the obverse, ie consumers will pay for the provision of the service and that that service will be provided to a minimum level. Any improvement should be rewarded and any reduction in service should suffer a lower payment for the service provision. As consumers pay more for the service, so there is an expectation that increased service will result.

It is totally inappropriate for the AER to allow the DBs increased revenue without an accompanying improvement in service.

Victorian DBs have been exposed to a service performance target incentive scheme for many years under the ESCV regulation. This was based on a regional approach rather than the AER preferred STPIS as detailed in the Service target performance incentive scheme released by the AER in November 2009.

Notwithstanding the changes between the ESCV and AER approaches, the principle is that the Victorian DBs have been exposed to a STPIS of some form for a decade. The EUCV is very supportive of a financial incentive to encourage better service performance and is comfortable with the scheme proposed by the AER.

Although there are some differences between what the Victorian DBs have been used to and what the AER STPIS requires, this should not be allowed to provide for any transitional approach as to do so, has the potential to allow the DBs to garner unearned benefits.

### **4.1 Principles in relation to the STPIS**

The EUCV has a number of observations regarding the various proposals made by the DBs in relation to the STPIS developed by the AER.

#### **4.1.1 Consistency**

The AER has established a STPIS with only a minor ability to incorporate variations from it. Different DBs have provided a number to the AER approach. Amongst the changes proposed is to exclude MAIFI, to reduce the revenue at risk, variability of event day classification, etc

The EUCV considers that variations from the standard approach should be minimal as one of the goals of the STPIS is for it to universal applicability.

#### 4.1.2 Risk minimisation

It must be accepted that a DB will seek to maximise its revenue (or minimise its loss) whilst minimising its risk – this is normal commercial business. As a result there is an expectation that the DBs will minimise their targets (as is quite obvious from all the proposals made) and reduce their exposure by qualifying the calculation of actual performance (eg by expanding the definition of event days and so reducing their exposure).

The EUCV considers that the AER must ensure that the risks faced by the DBs are commensurate with the potential rewards available to them.

#### 4.1.3 Setting targets

It is quite clear from all the proposals that the DBs have sought to reduce the service targets so as to maximise the potential revenue they can get from the STPIS. All the DBs have been exposed to service performance incentive programs for many years and the purpose of these programs is to ensure that this part of the regulatory bargain has a high degree of realism.

A typical example of this biasing of service targets can be seen in the proposal by CitiPower as shown in the following extract (page 267 CitiPower proposal). The EUCV stresses that all of the performance proposals show similar trends to that of CitiPower.

Reliability targets	2005	2006	2007	2008	2009 <sup>Y</sup>	Average
<b>CBD</b>						
SAIDI	11.9952	13.9108	6.9427	6.1103	18.8501	11.56182
SAIFI	0.1725	0.2648	0.1444	0.0898	0.2866	0.19162
MAIFI*	0.0076	0.0262	0.0207	0.0003	0.0280	0.01656
<b>Urban</b>						
SAIDI	18.2213	23.5886	23.5463	18.7501	28.4369	22.50864
SAIFI	0.3862	0.4609	0.5214	0.3518	0.5461	0.45328
MAIFI*	0.1728	0.1668	0.1591	0.1616	0.1796	0.16798

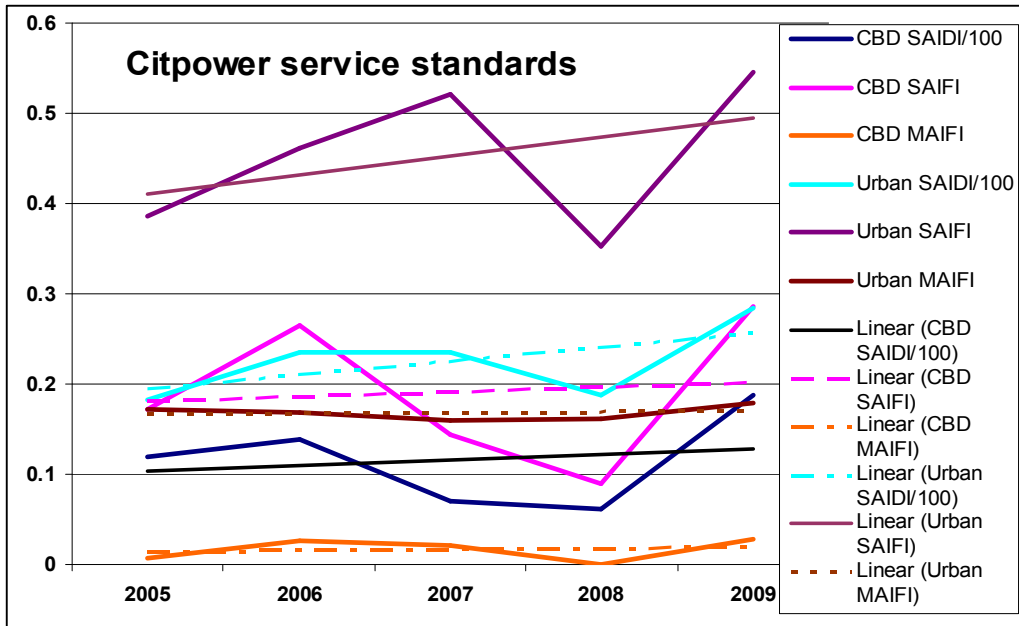
Table 10.1 Historic STPIS reliability performance

\*MAIFI calculated on the basis of the ESCV definition of MAIFI

<sup>Y</sup> Estimated annual value based on first 8 months actuals

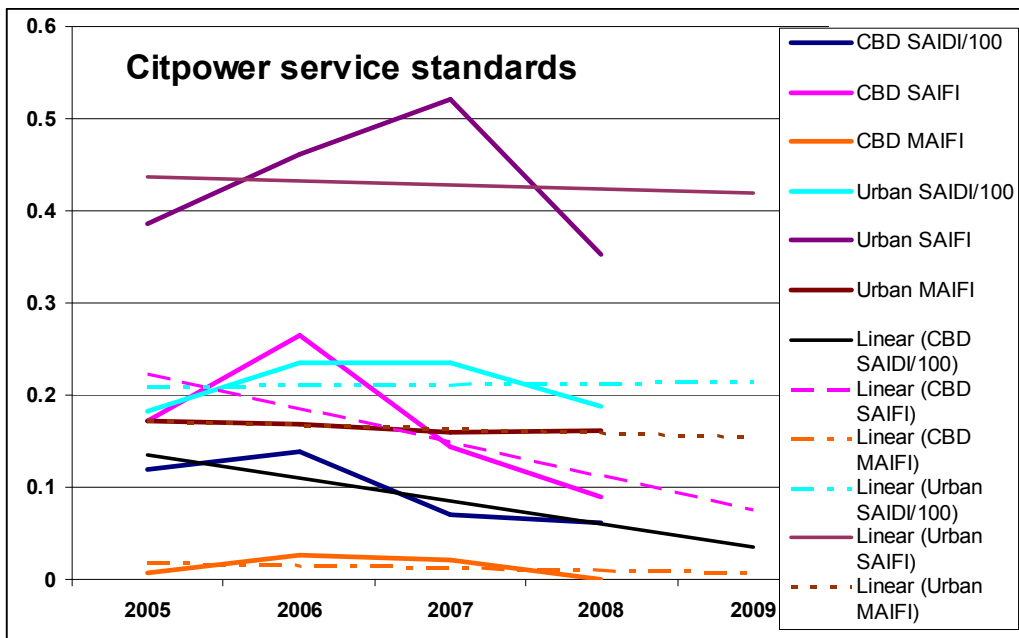
The EUCV is very concerned that the DBs have all indicated a higher than average forecast for 2009 and by doing so they have all increased the arithmetic average of the five year performance 2005-2009.

The Citipower proposal indicates that using the forecast (high) values, there is a consistent upward trend in the service performance, and this is shown in the following chart.



Source: Citipower proposal, MEU analysis

Excluding the high forecast values for 2009, the service performance trends are all downward sloping, implying a long term improvement in performance, despite there being some years where performance has exceeded the long term trend. This is shown graphically in the following chart.



Source: Citipower proposal, MEU analysis

Further the EUCV analysis indicates that using long term trends is a more equitable approach as it reduces the risk to the DBs where they experience poorer performance on a consistent basis, but also provides



consumers with the expected benefit of improved service over the longer term.

The AER should set the service targets so that they reflect the trend in performance rather than just applying an arithmetic average.

#### **4.1.4 Targets need to be challenging**

The potential bonus using the new targets should be at the “null” point, so that achieving the targets will not provide a bonus. There should be no bonus for achieving average performance.

Therefore the targets should be challenging, so that a bonus is payable when the service provided exceeds the service implied by the regulatory bargain.

#### **4.1.5 Service improvement over time is the aim**

Consumers are being requested by the DBs to pay more for what could be considered to be a lesser service (as the targets seem to be set less than they have achieved consistently over the past 10 years).

However there is an expectation that service will improve as a result of the increased payments, after all why should consumers pay more for the same or lesser service?

#### **4.1.6 Variation between customers**

All customers of the same type (CBD, urban and rural) pay the same for the provision of the service. Implicit in this is an expectation that all customers will get the same service

One of the features of the ESCV service improvement program was to assess performance on a feeder basis and for the worst performing feeders to improve service quality over time. The AER should continue assessing performance of the worst performing feeders with the specific goal of bringing all feeders to the same level of service performance.

Customers that get a better service than others (eg CBD compared to rural) should pay for the better service provided, and the tariffs and service performance targets should reflect the level of service each customer gets.

## **4.2 An observation regarding jurisdictional involvement**

There is often a requirement set by government (or an agency of government) that sets the minimum performance standards to be applied to electricity network service providers. For example in SA, ESCoSA sets the minimum performance standards and in NSW DEUS sets these values.

In Victoria, ESCV sets a number of service standards but allows the DBs to advise what the minimum expectation for service performance will be. These requirements are detailed in the Victorian Electricity Distribution Code, released in August 2009. The implication of the requirement in section 5 (Reliability of Supply) are that if the standards proposed by the DB are too low the ESCV may intervene.

It is unlikely that ESCV should be setting the levels as the basis for an incentive scheme as it has decided on using measures which the AER has flagged as being its preferred approach and ESCV no longer has the ability to set reliability levels commensurate with the opex and capex allowances made for the period.

It is noted that Victorian DBs have already been subject to some reliability and performance standards for its operations under ESCV regulation. At that time, ESCV was able to assess both the reliability settings and the capex and opex deemed appropriate to achieve these settings. ESCV appears to have, subject to very low standards being achieved, determined that the regional settings for reliability should be set by the AER – this approach recognizes that reliability settings must be assessed as part of the regulatory bargain which the AER is required to manage.

It is important for the AER to manage both the settings and the revenue allowed as these are closely related. It is easy for a jurisdiction to set very high performance standards in the secure knowledge that it will not be held to account for the costs of achieving the outcomes of its directions, and equally the jurisdiction could set reliability levels which are easily achieved with a large revenue allowance made by the AER.

Independent jurisdictional groups are not able (and probably not in the position) to analyse the costs of achieving a proposed performance standard and therefore cannot balance the risks associated with a capital project being not implemented or deferred, and the impact of the jurisdictional performance standards set.

ESCoSA undertook a review of the willingness to pay for increases in reliability<sup>14</sup>. This found that in SA there was not a general willingness to pay for increased reliability. The AER should take note of this survey and report in its evaluation of service standards for the Victorian DBs and in its evaluation of the proposed Victorian DB capex programs.

#### **4.3 The STPIS**

A STPIS is the way that the regulatory bargain can be balanced. Consumers increase the revenue allowed the regulated business in return for improved performance. The regulator is tasked with ensuring the benefits of the

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<sup>14</sup> KPMG Consumer Preferences for Electricity Service Standards, September 2003

increased allowances for capex and opex are translated into a performance level that consumers would see is appropriate for the service provided.

Victorian DBs have converted the regional performance as assessed under the ESCV approach into the AER STPIS approach. These calculations need to be verified.

The settings in a STPIS should not result in an automatic payment of a bonus. In the absence of any attempt by the DBs, there should be no bonus payment made, and the value of increased capex and opex must be included to ensure that consumers do not pay twice for improved service – once by paying large capex and opex allowances and the second time by paying a bonus for achieving the benefits resulting from the increased revenue.

The AER needs to calculate the bonus/penalty applicable to the DBs for the previous performance and ensure **as a minimum** that the targets set would result in no bonus or penalty being paid. However as there is an expectation of consumers that any increased payments for the service (as proposed by the DBs) will achieve a benefit to consumers (and not increase the DB profits), the targets need to be made more challenging, perhaps by being set 10% lower than the calculations might otherwise indicate.

The clear indications of the DB proposals is that if the proposed targets are set, there is a higher than average expectation that they will achieve a bonus payment, even though it is likely (based on previous AER decisions) they DBs will be increased allowances for capex and opex.. This is unacceptable to consumers for the reasons stated above.

## **5. Cost of capital and allowed revenue**

### **5.1 WACC**

In the recent reviews of the SA and Queensland DBs, the AER was required to review applications from the DBs to vary the WACC input parameters from those developed as part of the WACC Review early in 2009. The AER is permitted under the Rules to vary the input parameters for distribution from those established each five years for transmission, but clearly the AER must have regard for the work carried out in developing the parameters in the WACC review recently concluded. The AER has determined in its draft decision on ETSA Utilities that it does not consider there is sufficient reason to vary the WACC input parameters from those published in its WACC review released in 2009.

The Victorian DBs has identified two parameters where they consider the WACC review did not deliver outcomes appropriate for their needs – the market risk premium and gamma. The Victorian DBs reiterate submissions provided to the AER by other DBs and provide more academic analysis indicating that MRP should be set at 8% (up from the traditionally used 6% and the AER set 6.5%) and a value for gamma of 0.5 (a return to the previously used value, down from the AER decision of 0.65).

In its determination on the WACC parameters, the AER made two quite telling observations:-

- In relation to MRP, it observed that (page 238 of its final determination)

“The AER considers that prior to the onset of the global financial crisis, an estimate of 6 per cent was the best estimate of a forward looking long term MRP, and accordingly, under relatively stable market conditions—assuming no structural break has occurred in the market—this would remain the AER’s view as to the best estimate of the forward looking long term MRP.”

- In relation to equity beta, the AER noted (page 343 of its final determination)

“Market data suggests a value lower than 0.8. However, the AER has given consideration to other factors, such as the need to achieve an outcome that is consistent with the importance of regulatory stability.”

The Victorian DBs did not decide to query whether a higher level of equity beta should be used, and forbore to suggest a reduction in equity beta even though the AER considers that an equity beta of 0.8 is clearly more than the

high end of the range of 0.41 to 0.68 the it calculated on an empirical basis as an appropriate value.

Equally there was no suggestion that the AER should examine the level of gearing which applies to the notional electricity distribution business (eg for example Spark (which holds CitiPower and PowerCor) and Duet (which holds United) currently have accounting gearing levels of ~80% and SP Ausnet a gearing of ~70% (source: CommSec data).

It is clear that the DBs all have decided to only query WACC parameter inputs where they consider there might be an argument to justify higher values, and to not query any inputs where there might be an argument to reduce the values set in the AER WACC review. In its submissions to the AER on the WACC review, the MEU (on behalf of its affiliates and the Consumer Roundtable) pointed out that there is a high degree of interdependence between the various inputs, and therefore an holistic approach is necessary to setting the WACC inputs. By and large the AER concurred with this view and its workings show this feature in many instances. The approach by the DBs effectively negates the concept of an holistic overview, and therefore if the AER decided to open up this debate, it should also decide that other input elements should be investigated and perhaps changed.

If the AER considers there is persuasive evidence to vary the MRP and gamma values (which it did not do in the ETSA draft decision), then the EUCV considers that there is a strong argument to open up other WACC input elements for re-evaluation, such as the actuality of gearing of the DBs and the conservative setting for equity beta.

The EUCV does not support this approach and recommends that the AER recognize that its WACC review is still current (being completed less than 12 months ago) and the inputs should remain as determined in that review. There is a strong view that regulatory certainty should be an over-riding concern, and to vary some of the WACC inputs so soon after the deep and comprehensive analysis carried out in the WACC review raises serious credibility issues of the AER analysis and defeats the principle of regulatory certainty.

### **5.1.1 Market risk premium**

In relation to the value of the MRP, the AER made it quite clear that their decision to increase MRP from the traditional level of 6% to 6.5% was a directly attributed to the impact of the current global economic conditions. Indeed, in both its Issues Paper and draft decision, the AER had consistently contended that an MRP of 6% was appropriate. In the period between the issuing of the draft decision and the delayed release of the final decision in May 2009, the AER took recognizance of the impact of the global outlook, and made this quite clear in its final decision. What

was not considered by the AER at the time was the impact of the GFC on the risk free rate.

With the falling share market money was transferred into lower risk securities, notably government bonds, increasing their price and reducing the yields. This had the impact of implying there was an increase in the difference between the risk free rate and the accumulation index of all shares.

At the same time as the impact of the GFC was occurring a number of the large companies on the ASX were seeing the revenue from contracts set at the peak of the commodities cycle still maintain high profitability and therefore high dividends. The most recent profit reporting cycle which clearly shows a reduction in dividends as the impact of the Australian economy slowdown bites and new commodity contracts are set at much lower values, thereby reducing the accumulation index.

Concurrently the economic stimulus packages provided by governments has increased the need for government capital raisings through bond issues. The large amounts of funds required are forecast to increase the yields on government bonds (the risk free rate) reducing the market risk premium between the government bond yields and the accumulation index.

Whilst the full extent of the decision of government to inject large amounts of capital into the economy was not fully clear at the time of the AER final decision on WACC, it is now very clear that the decisions by government will increase bond yields and therefore reduce the market risk premium. The impact of this large capital borrowing by government is forecast to last past the next AER review of WACC parameters.

In the attachment J.1 to the ETSA Utilities<sup>15</sup> application, the ETSA consultant CEG draws the conclusion that based on historical government debt yields and the current state of the economy, the MRP is higher than the value set by the AER.

What the AER attempted to identify in its WACC review were values based on a forward looking basis. Following this line, the AER would have to assess its expectation of MRP based on a forward estimate of both the accumulation index and the future risk free rate. It is quite clear that the future risk free rate will have to recognise the impact of the massive government borrowings to fund the various stimulus packages used to mitigate the impact of the GFC.

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<sup>15</sup> It should be noted that ETSA Utilities, Citipower and PowerCor all have common ownership, and therefore it could be assumed (in the absence of the appendices to the Citipower and PowerCor applications) that they have a similar view to that of ETSA.

It is now well accepted that MRP varies widely over relatively short periods of time. When the MRP was lower in the early part of this decade, regulators considered that there was great importance of stability and regulatory certainty and, with this in mind, determined to use the long term historical data as the basis for their decisions. In its final decision on the WACC review the AER stated quite clearly that MRP needed to be higher due to the current economic conditions. Yet still the AER was of the view that it anticipated a return of the MRP back to the long term historical level of 6%, in the absence of a “long term structural break”.

If the AER is persuaded that there is a need to re-address the value of MRP in light of the very recent changes<sup>16</sup> it also needs to assess the expectation of increases in the value of the risk free rate as a result of the heavy government borrowings. These heavy borrowings will also increase risk.

Up to the end of 2008, the Australian government CGSs were issued, not to raise capital, but to maintain a market for CGSs. As the Australian government was effectively not in debt, there would be the perception of a lower risk for the CGS than now when the government is and will continue to borrow in earnest on the basis – the larger the debt, the larger the risk. If this premise is accepted, then just as CEG alleges the risk of equities will rise, then so will the risk for CGSs, retaining the differential between the two relatively constant. If this differential is constant, then it is difficult to sustain an argument for an increased MRP.

Equally, the AER has stated a need for stability and regulatory certainty. To change the MRP value based on additional information that has been provided within a few months of its detailed analysis of the parameters, raises the spectre of a regulator which sees stability and regulatory certainty as a second order issue.

Prima facie there does not appear sufficient new evidence to support the Victorian DBs contention that MRP should be raised at all, let alone to 8%. If the AER is persuaded there is sufficient evidence to further increase MRP, then it introduces a scenario where MRP should be varied on a much more frequent basis, both up and down as the market varies.

The EUCV considers that regulatory certainty (used as the basis for many years of regulation) must be given credence in the AER assessment of this request from Victorian DBs.

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<sup>16</sup> For example CEG suggests that the market is now more risky and needs a higher MRP to reflect this risk

### 5.1.2 Equity beta

Victorian DBs has not requested a reduction in equity beta, although the AER final decision clearly flags that an equity beta of 0.8 is probably higher than it need be. The AER decision to use an equity beta higher than the market data might indicate was based on the assumption that regulatory stability is an essential element of its WACC parameter decision.

The EUCV is not proposing that the equity beta for Victorian DBs should be lower (even though it considers that by using the value of 0.8 the AER is providing Victorian DBs with a higher than needed WACC) because EUCV supports the AER in the view that “regulatory stability” is a key element of its approach to the WACC decision.

**If regulatory stability is sufficient cause to allow a higher than needed equity beta being used, then equally the same philosophy must apply to its decision on MRP.**

**If the AER decides that regulatory stability is not required for the value for MRP, then it should readdress its decision on equity beta, bearing in mind that its decision to use a higher than needed equity beat is predicated on the presumption of regulatory certainty and stability.**

The AER comments in its final decision on WACC parameters (page 343) that:-

“The empirical evidence considered by the AER suggests that the equity beta of a benchmark efficient NSP is in the range of 0.41 (average portfolio estimated by the AER for Australian businesses post ‘technology bubble’) to 0.68 (average portfolio estimated by the ACG for the JIA using a five-year estimation period).”

The EUCV therefore would recommend that if the AER is of a view that regulatory stability is not sufficient to maintain its view that the MRP should be 6.5% and allow an increase based on the Victorian DBs application, then it should also open up the valuation of equity beta and reduce it to a value which is determined by the market rather than be overstated as the AER has done, on the basis that regulatory stability is too important an issue to allow it to be set at the level determined by the market.



### 5.1.3 Gamma

Victorian DBs provide information indicating that gamma should be set to the historical level of 0.5, rather than use the AER determined value of 0.65 reached after the WACC review.

Victorian DBs provide information professing to provide new evidence that the AER decision on gamma is incorrect. Again in the absence of the consultant reports in the Victorian DB applications, it appears that the DBs use the same information provided by ETSA Utilities in its application to the AER. The EUCV comments:-

- Skeels explains that the AER is incorrect to assume there is a difference between the studies of the utilisation rate which the AER assumed gave them boundaries on which to average the difference. In fact what Skeels overlooks is that the upper bound derived by the AER of 0.74 for theta was itself an average of a "...reasonable range of theta estimated from tax statistics [of] 0.67 to 0.81..." (AER page 467). On this basis the range could well have been 0.57 to 0.81 giving an average point of 0.74 for theta.
- Feros explains that he does not consider that the Tax rules are designed to give 100% of the imputation credits back to the market, and provides his professional view why Handley is incorrect in the advice Handley gave the AER. Feros does not provide a view on what the value for gamma should be but effectively states that the payout ratio must be less than 1.00.

As the AER has settled on a value for gamma of 0.65, it accommodates the points made by Skeels and Feros on the final value it uses for gamma as the AER, by averaging the boundaries it identified has effectively made allowance for both views in its approach.

### 5.1.4 Conservatism in the parameters

In its submission to the AER draft decision on the WACC parameters the Major Energy Users analysed the derivation of each of the set points derived by the AER for the parameters. Using the AER's own data and range of values it identified as the most likely for each of the parameters, the MEU observed that it:-

- "Agree[d] that the AER should take a 'holistic' approach in its WACC built-up and to also reflect the risk reduction approach applying to the electricity network industry, such as the pro-industry rules applying to proposals for capital expenditures (as part of the AEMC's concept of incentive regulation), non-optimisation of the regulatory asset base, automatic indexation of assets, etc.

- Note[d] that the AER has deliberately incorporated conservatism into its draft decision, but does not quantify its magnitude. Our analysis suggests that an additional premium of over 20% has been added to the market premium above the risk free rate, based on the use of factors including:
  - Reduced level of gearing
  - Inflated gamma used in the market risk premium
  - Excluding the “Tech Boom” in isolation of the many other exogenous impacts which act to increase the equity beta
  - Adopting lower credit rating, even though two thirds of network businesses are government-owned and have higher credit ratings than privately-owned businesses, as well as including gas network businesses, which have higher weather dependent risks.
  - Treatment of tax imputation available, despite the extent of government ownership of the network businesses.”

The EUCV considers that the setting of the WACC parameters cannot be done in isolation and mechanically developed. All of the elements bear some relation to the others used in the development of the final value for WACC. To isolate one or two elements and accept the others does not recognise the inter-dependence between the elements.

The MEU identified that generally the AER took a conservative view on each parameter and if it had used the mid point setting for each, would have provided an outcome which would have resulted in a lower overall WACC.

If the AER is of the view that there is “persuasive evidence” to change the WACC parameters based on the Victorian DBs application, it should re-open other WACC parameters as these also might have varied as a result of the global financial crisis.

**On balance the EUCV does not consider that in such a short time since the WACC review was completed (only four months ago) there can be adequate additional information which would make a significant difference to the AER decision in May 2009.**

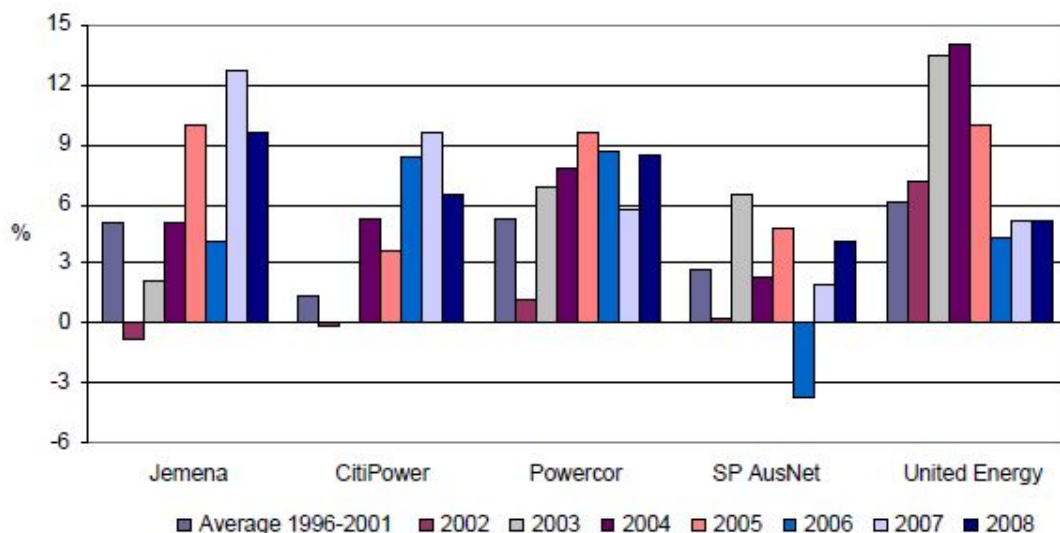
## **5.2 Revenue allowed and the impact on consumers**

The Victorian DB claims have their revenues increasing at a very high rate.

The AER release its Victorian Electricity Distribution Businesses Comparative Performance Report 2008 dated November 2009, and in this there are some very telling aspects of the way the DBs have operated so successfully. Over the past decade, the DBs have consistently recovered

more cash from consumers than was expected by the regulator, with a very few exceptions such as Jemena in the years 1996-2001, and SP Ausnet in 2006.

Figure 2.6 **Electricity distributors' revenue**  
Difference from forecast



Source: AER

The large increases in revenue compared to expectation in 2008 were achieved with much more modest increases expected in consumption, indicating that the DBs are able to use the regulatory approach to outperform the expectations of regulators. As might be expected with larger than expected revenues, pre-tax profits for 2008 were also well above the amounts included in the ESCV decision in 2005.

2008 data	Increase in revenue	Increase in consumption	Forecast pretax return	Actual pretax return
CitiPower	6.5%	3.4%	6.6%	8.5%
Jemena	9.6%	4.4%	6.5%	10.8%
Powercor	8.4%	0.9%	6.2%	9.0%
SP Ausnet	4.1%	1.3%	6.7%	8.0%
United	5.1%	-0.6%	6.0%	8.4%

Source: AER

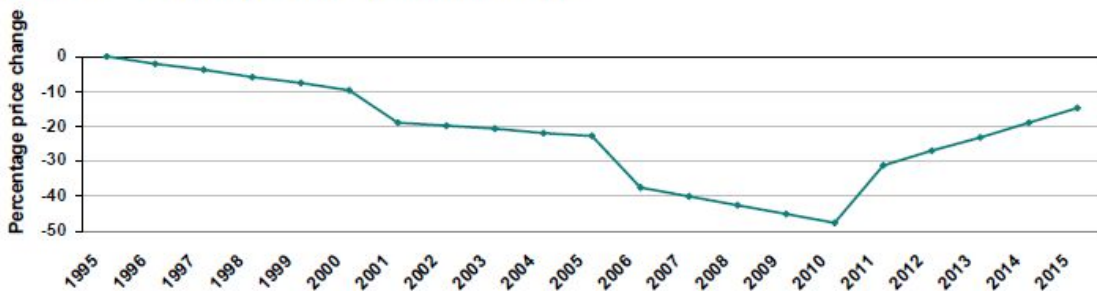
The fact that United achieved an increase in revenue despite a fall in consumption indicates that the concept of a price cap approach (where the risk of varying consumption lies with the DB) can be readily adjusted to the benefit of the DB.

Despite this consistent financial outperformance, each of the DBs has proposed a significant step increase in both revenues and tariffs for the 2011 year, followed by differing annual increases thereafter. This follows a

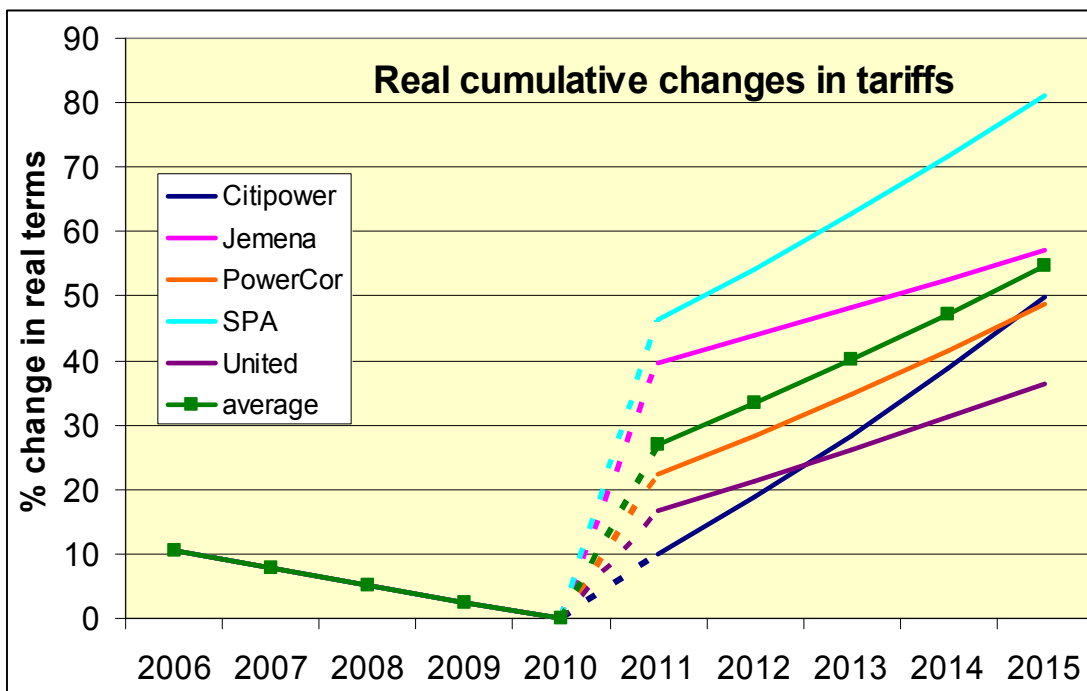
series of tariff reductions that the ORG and ESCV have implemented since the Victorian market was disaggregated.

In fact United shows this falling tariff arrangement quite clearly in its figure 2.6 of its application. This shows that most of the effect of the benefits implemented since 1995 over three regulatory periods are to be effectively removed in a single regulatory period. This provides a clear indication that the current proposals are excessive and probably ambit.

Figure 2-6: Cumulative price changes, 1995 - 2010



The impact of the DB proposals shows that, on an arithmetic average basis, (shown by the green line) tariffs in Victoria will rise by about 30% as a step change between the regulatory periods followed by annual increases of some 5% thereafter. These are shown graphically in the following chart which also shows the reductions achieved in the current period<sup>17</sup>.



Source: Victorian DBs applications, ESCV FD 2005

<sup>17</sup> The ESCV decision in 2005 had all DBs having the same annual reduction after different P<sub>0</sub> adjustments for each DB to apply between 2005 and 2006

The EUCV is very concerned that the Victorian DB applications will result in such large increases in tariffs, especially considering that over the past three regulatory periods, tariffs have continued to reduce. The EUCV accepts that the continued real reduction in tariffs would be difficult to sustain.

Already, Victorian consumers are exposed to:-

- A potential large increase in power costs due to the imposition of the CPRS which will have the greatest impact in Victoria due to its reliance on brown coal.
- The impact of the expanded MRET scheme, with the effects applying to both the retail cost of power and the need to significantly augment the network to manage the increased use of intermittent power
- Transmission cost increases of >30% resulting from the AER decision on SP Ausnet transmission charges

In this context, many large energy users are seeking alternative approaches to ensuring their power supplies with a potential impact of them reducing the amount paid to network businesses. Any loss of large energy user contribution to the network businesses will result in larger contributions having to be made by a lesser number of consumers connected to the networks.

The EUCV is of the view that such tariff rises as proposed by the Victorian DBs are not only excessive but also unnecessary. They will result in considerable hardship to many Victorian electricity consumers.

SACoSS in its report "Cost of Living Biannual Update No. 1" issued in July 2009 provides an indication of the cost impact on the poorest quintile of electricity consumers resulting from electricity charges. SACoSS goes on to note that of the poorest 30% of households identify that paying their electricity charges is the second most common cause of financial stress (SACoSS figure 8). It is pertinent to note that the lower income quintile households have a greater proportion of elderly and young families than those in the higher quintile ranges. At the same time these are the households which use their residences during the daytime when power demands are at their highest.

In a private communication<sup>18</sup> to the chair of ECCSA (the SA affiliate to EUCV), UnitingCare Wesley Adelaide (UCW) observes:

"The cost impacts on essential services on households are highly income sensitive. For example, the poorest 20% of South Australian households are

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<sup>18</sup> This was at the time of the ECCSA presentation to the AER forum on 6 August addressing the ETSA Utilities application seeking a 10% increase in P<sub>0</sub> followed by 10% annual real increases,

probably paying 12-14% of their available income on electricity at the moment, while the wealthiest 20% pay about 1% of income, despite using about 50% more electricity than low income households. This is based on the 2002/3 ABS Household Expenditure Survey when the poorest quintile was paying about 8% of income on electricity. [UCW suggests that there will be] about a 50% price increase since then, to get to a 12% [estimate] for the current period.

The impacts on low income households of even a modest increase in essential service charges are huge... In short, there is no capacity for low income people to pay more for electricity.”

Whilst this observation is in relation to SA consumers, the clear implication is that the massive increase in Victorian DBs charges will fall most heavily on those households least able to absorb the increased costs. Distribution network charges comprise nearly half of the total cost of delivered power to residential consumers so an increase in network charges of the magnitude sought by Victorian DBs will increase this financial pressure and burden to an even greater extent.

Equally, small and large businesses, already under financial stress due to the global economic downturn will be facing these large charge increases. One solution for these businesses is to close down, and the loss of revenue for the network will be to increase charges on fewer consumers, further increasing costs.

The AER has previously advised that it is required to assess an application from a regulated entity “on its merits” with due care for ensuring the distribution business has sufficient funds to provide the service required. The AER also has a responsibility to ensure the long term viability of the regulated entity and allowing it to increase its charges by too great an amount has the potential to result in a business which is not commercially viable in the long term because its customers cannot afford its services.

Electricity supply is an essential service and in a first world country for a regulator to allow the provider of an essential service to price its product at a level where it either causes financial hardship to a large element of the service users or to ultimately cause users to cease using the service due to the cost being too high, is clearly not in the purview of a regulator.

The EUCV has the view that the AER must balance the ability to pay for the service against the aspirations of a monopoly to maximise the cost of the service it provides.

### 5.3 Pass through events

In its Final Decision ESCV allowed Victorian DBs the following pass through events which would allow Victorian DBs to increase its costs (ESCV final decision page 487)

“The Commission will include a mechanism in the price controls to allow for the pass through of costs or savings associated with:

- A change in tax event.
- The financial failure of a retailer.
- A declared retailer of last resort event.
- Major projects events”

The ESCV went on to qualify what it considered to be acceptable qualifications for “pass through” events. For example it pointed out that a pass through for a major project event was limited to just the ability of CitiPower to “pass through” the costs associated with the CBD reinforcement. Tax events are also qualified.

As well as the pass through events included in the Rules and previously allowed by the ESCV, Victorian DBs are seeking additional events to be included in the list for pass through to be allowed.

As a principle, EUCV accepts that certain aspects of providing a regulated service might, at times, result in a risk to the NSP that they could not foresee at the time of a regulatory review, and which they cannot recover within the existing allowances. Equally in a competitive industry, pass through events do not automatically result in increased revenue by raising prices, and in fact many such equivalent pass through events have to be absorbed by the business affected. A case in point is the imposition of the costs of CPRS and MRET legislation, where most Australian businesses will have to absorb the costs as many imported competing goods (such as from China, India and south east Asia) will not be subject to these imposts.

Victorian DBs has provided detailed reasons why the WACC (which includes their profits) should be increased – the predominant theme in these reasons is that the market as a whole has increased its costs to debt and equity and, implicitly, its return on assets employed.

The EUCV is concerned that inherently allowing both an increase in the WACC (as the AER has done by increasing the market risk premium and taking a conservative view on equity beta in its recent WACC parameters review) and the ability to reduce risk by the inclusion of the increasing use of pass through provisions, will allow Victorian DBs an effective “double dip”.

Some of the new pass through events sought by Victorian DBs were already discussed and excluded by ESCV in its review in 2004, and to now include

them would be inappropriate as it would impact regulatory certainty. Others are effectively included in the WACC as part of the risk involved with operating a commercial enterprise, and some will be addressed as part of the acceptance of actual capex at the next review where actual capex is rolled into the RAB.

The main concern that EUCV has is that Victorian DBs have requested large increases in both opex and capex. Including a pass through event would effectively allow them to increase the capex and opex allowances. Already there is concern that Victorian DBs (as they have already shown) will not use any allowance increased by the AER to the full amount claimed, and allowing pass through events to further increase these allowances will only increase the overall benefit Victorian DBs will accrue.

The EUCV further considers that Victorian DBs should be required to absorb the costs of any pass through events until the current capex and opex allowances are exceeded, and then for new pass through events to be considered on their merits, with the potential that the AER might allow the costs to be added to the allowed revenue. This approach has the benefit of imposing constraints on Victorian DBs for seeking pass through events to be allowed into their revenue rather than encouraging them to seek every avenue to increase revenue under this provision. It further avoids the imposition of a materiality test or bright line approach until the available capex and opex is used. At this point a bright line approach is preferred to ensure the issue being addressed is material.



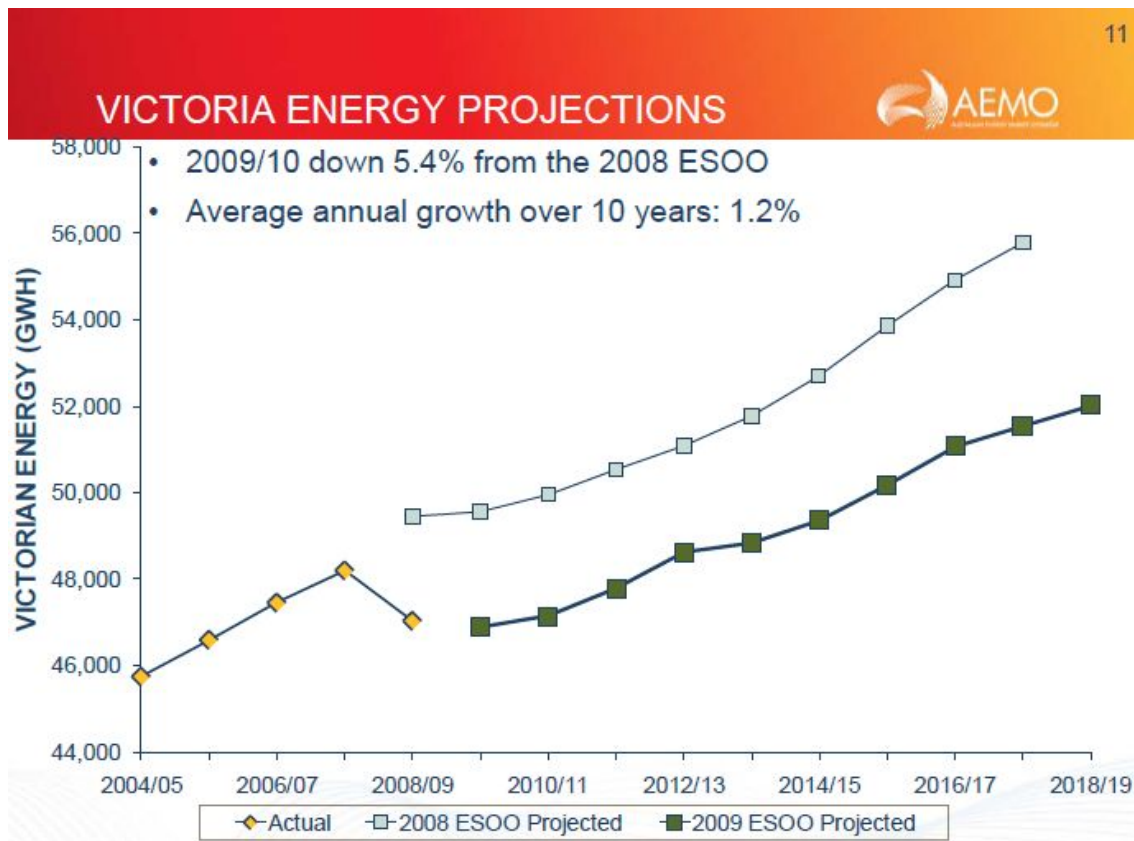
## 6. Demand and consumption forecasts

Victorian DBs have used their own and NIEIR forecasts as the basis for the expected growth in consumption and peak demand.

AEMO has carried out a similar exercise for the AER in relation to the ETSA review, and the AEMO review (similar to the ESIPC and VENCORP reviews did in the past) seems not to reflect the claims by ETSA, especially in relation to the consumption forecasts which form the basis of new tariffs.

Another form of regulatory gaming is the under estimation of future consumption growth (used for tariffs) and the over estimation of customer numbers and expected peak demand (used to sustain large capex claims).

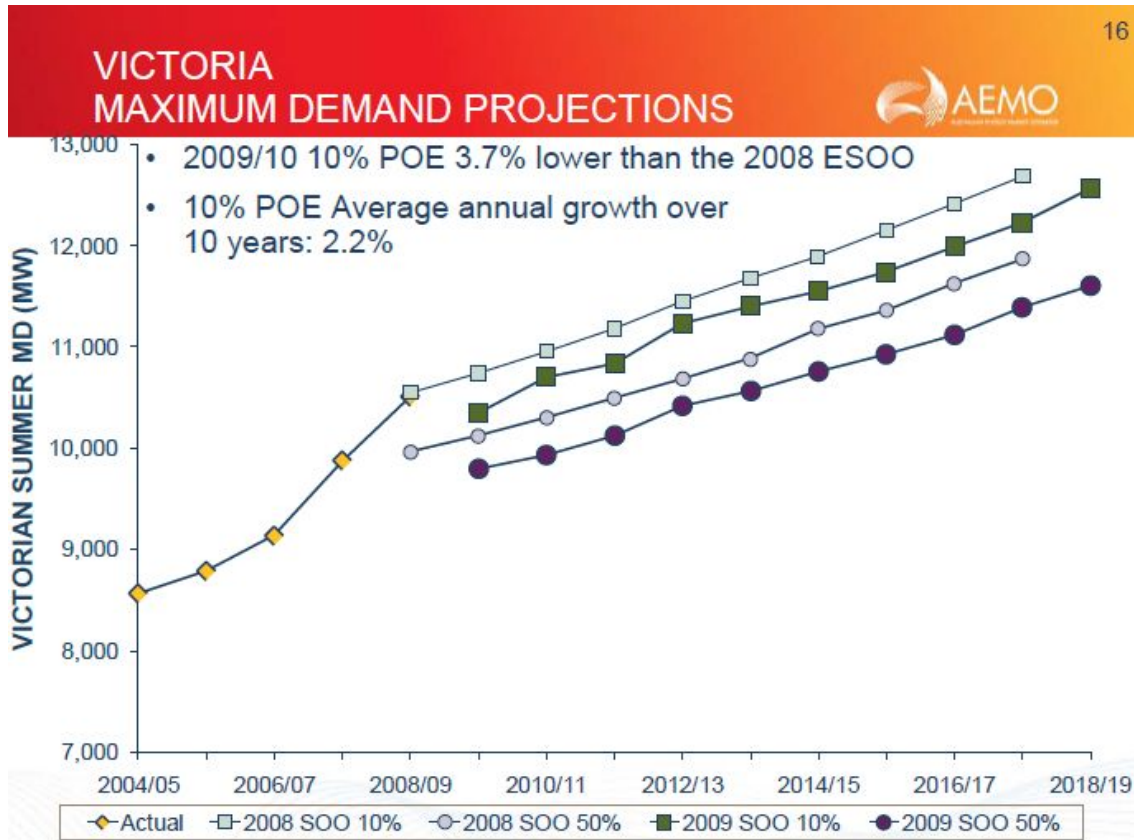
In its Electricity statement of opportunities AEMO has forecast a continuing increase in electricity consumption for Victoria, after a small reduction in demand resulting from the downturn caused by the global financial crisis and its associated impacts on Australia's economy



There seems to be some inconsistency between the DB assessments of future consumption (being negative over the next five years) and the AEMO forecast suggesting there will be a **consistent 1.2% annual increase** in Victorian electricity consumption. During the current regulatory period, except for the

GFC caused drop off in 2008/09, the increase in consumption was even higher than that forecast by AEMO for the next period.

The AEMO view on peak demand growth forecast an annual increase of 2.2% compared to an increase in the current period of 3.7% annually.



In contrast the DBs are forecasting the following larger increases in demand and reductions in consumption.

Annual growth	CitiPower	Jemena	PowerCor	SP Ausnet	United	Av	AEMO
Demand	2.7%	2.7%	2.3%	4.4%	2.6%	<b>2.9%</b>	<b>2.2%</b>
Consumption	-0.8%	-2%	-1%	-0.6%	-1%	<b>-1.1%</b>	<b>+1.2%</b>

It is accepted that the AEMO numbers are for Victoria wide, but in principle the sum of the five DBs should match the AEMO forecasts. As usual, the DBs appear to have over estimated the likely increase in demand and under estimated the increase in consumption.

The AEMO analysis shows that forecast growth in peak demand (the main driver of the need for capex the new period will be less than in the current period by a considerable amount (ie 3.7% current c/f 2.2% forecast). The import of this observation is that prima facie, there is less need for demand driven

growth in the DBs than applied in the current period where capex is much less than is forecast for the next period.

The Victorian DBs state that in aggregate they expect over the next regulatory period, peak demand to increase by 2.9% pa and for consumption to fall by 1.1% pa over the period.

The implications of the mismatch between Victorian DBs and AEMO forecasts is that based on the Victorian DBs forecasts

- The higher increase in peak demand implies a greater need for capex to manage the additional demand
- The lower forecast for consumption implies a higher tariff rate to recover the increased revenue over a smaller volume, an approach which incentivises Victorian DBs to understate its expected consumption.

### **6.1 Gaming the regulator using forecasts**

As the AER sets a price cap for the distribution businesses (rather than a revenue cap as used for transmission businesses) the setting of the demand forecasts becomes a critical element of the review. As the key determinant for setting the price cap is consumption (kWh) there is potential for the distribution businesses to manipulate the forecasts in two basic ways.

The first and most obvious way of gaming consumption is by understating the expected increases in consumption entirely. Using this lower figure in the denominator of the calculation, overstates the amount of funds raised on a unit basis.

The second way of gaming using the forecast of consumption is by front end loading the forecast growth over the period. Whilst the average growth for the period may be the same, front end loading allows the businesses to recover cash earlier and therefore provides a greater net present value of the cash flow to the business. The effect of this earlier cash flow allows the business to earn a return on the funds over-recovered.

Careful analysis of the forecasts is required to assess whether the DBs are using one or both of these techniques to secure an improved position to increase their revenues without having to physically do anything.

Overstating demand growth and new customer numbers give support to increases in capex and opex. However, neither growth in demand averages nor new customer numbers support the requested increases in capex.

**Notwithstanding this the EUCV has identified a trend amongst electricity networks using a price cap approach, to overstate the growth in new connections and in demand (MW) as this adds justification to their claims for capex. Countering this, the networks**

**tend to understate the growth in consumption (MWh) as this amount is used in the denominator of the price cap and tariff calculation. We would therefore counsel the AER and its consultants to closely examine past applications and forecasts to identify any trends in under- or over-forecasting which has led to acceptance of increased capex claims or to gaming tariffs by under estimating forecast usage.**

The EUCV suggests that the AER should evaluate the revenue actually received by Victorian DBs over the current period to assess where the actual revenue varied between the different sources of the revenue. For example, in the review of the Victorian electricity network businesses in 2005, ESCV identified that the DBs made a significant over-recovery in revenue due to the prices used in the tariff build up being overstated due to a lower estimate of consumption being built into the development of tariffs<sup>19</sup>.

ESCoSA noted in its review in 2004, a similar trend to that seen by ESCV. Because of this ESCV decided in its reset in 2005, to allow for an adjustment of the final allowed revenue (the Q factor) to minimise the impact of any gaming of the forecast consumption figures during the review process.

Thus the EUCV would strongly support the AER in securing independent assessments for forecast growth on which to base the price caps after it determines the appropriate revenue stream for Victorian DBs and to implement a similar measure to minimise the impact of gaming of the forecasts of peak demand and consumption.

## **6.2 Utilisation of assets**

An implication of the higher peak demand rate of increase in the current period is that despite this increase the DBs were able to maintain an appropriate level of utilisation. In fact there were few episodes in the distribution networks where there was load shedding due to assets being overloaded despite there being a high rate of increase in demand.

Because there is a lower rate of peak demand growth for the next period, it is expected that the utilisation rates of hardware in the Victoria DB networks will not increase sufficient to cause the high amount of capex targeted for growth needs.

This apparent inconsistency warrants closer examination by the AER, as do other claims by Victorian DBs as justification for the large increases in capex.

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<sup>19</sup> The ESCV also identified that the businesses had recovered unplanned revenue due to under spending in both capex and opex.

## 7. Pricing Methodology

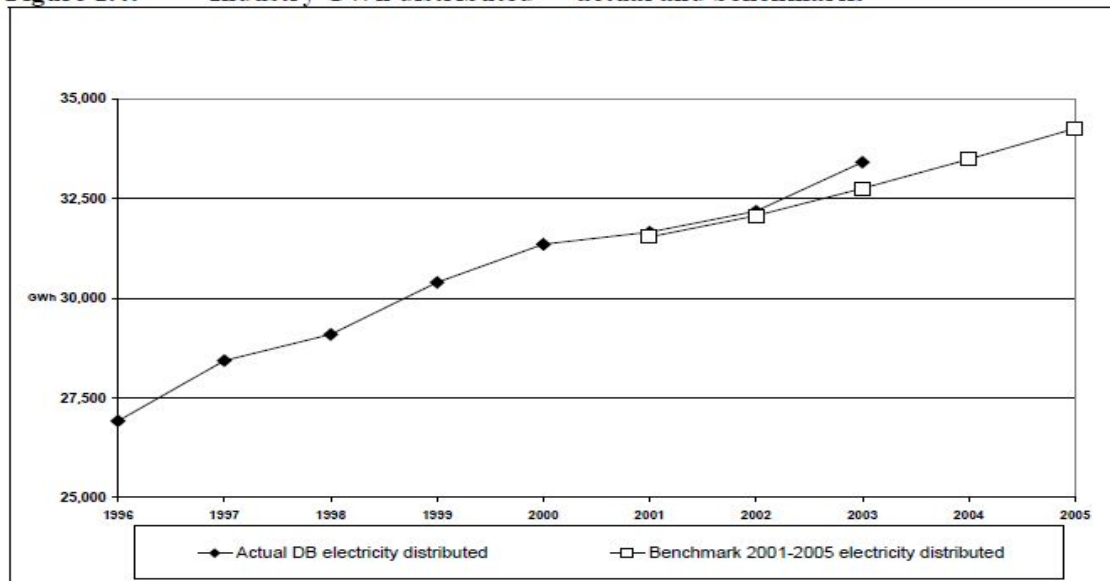
In the recent decision underpinning Chapter 6 of the NER, the MCE has accepted the principle that distribution pricing is more a matter for users of the transmission network than for the DNSPs, although it is accepted that under a price cap pricing approach, the DBs are incentivised to increase demand and consumption as by doing so they will increase their revenue. Because of this exposure to varying demand, there is an incentive on a DB to include higher tariffs where it considers increased growth is more likely to occur and to use lower tariffs where growth is expected to decrease.

Because of this pricing was of interest to regulators but only to the extent of establishing a mechanism to manage the price movements overall. Under the new Chapter 6, the regulator is required to ensure that the individual prices for each service are set as close to cost reflectivity as is reasonable. These changes to Chapter 6 now require the AER to ensure that the prices developed by DBs are based on sound economic principles.

In its review in 2005, the ESCV assessed the actual revenue received by the DBs in the period 2001-2005 and compared this to the revenue the ESCV allowed to be received, adjusted for the change in growth. The ESCV identified that the DBs had received considerable “unearned” revenue as a result of the mismatch between growth and the tariffs used for each growth element.

In its position paper<sup>20</sup> relating to the 2005 review, the ESCV highlighted that growth, whilst higher than forecast, was only marginally higher than forecast (position paper figure 1.4).

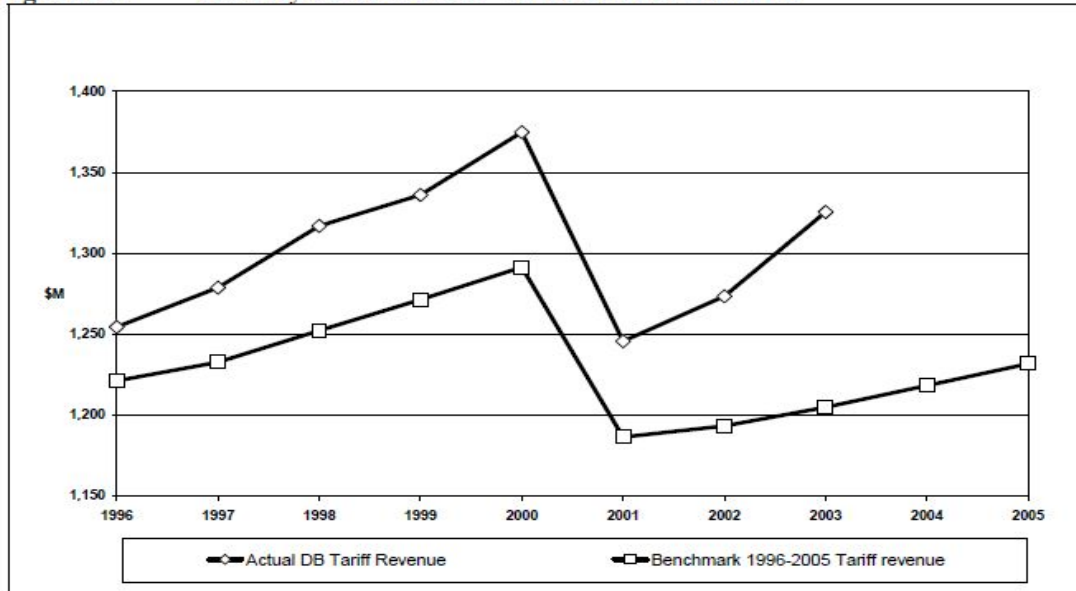
Figure 1.4: Industry GWh distributed — actual and benchmarks



<sup>20</sup> ESCV Position Paper March 2005, Electricity Distribution Price Review 2006-10

In contrast the revenue received was significantly higher than forecast (position paper 1.5).

Figure 1.5: Industry tariff revenue — actual and benchmarks



The import of this analysis by the ESC is that by careful tariff structuring, a DB can generate more revenue than the regulator considered sufficient for the DB to meet its obligations. Over a five year regulatory period 1999-2003, the amount of excess revenue received approaches \$500m, of which little is related to excess growth.

This example is provided to highlight the importance of the regulator ensuring that the tariffs actually set do not allow for windfall benefits to the DBs.

## 7.1 A shared network: the underlying principles

As consumers are the prime providers of funds to support the distribution network, they accept that having a jointly shared facility is by the far the most cost effective approach to the provision of a natural monopoly service. Not only would it be absurd for each user to have a separate supply arrangement for its provision of power, it is economically inefficient from a national viewpoint for this to occur. Having established that a joint facility is the most appropriate approach for infrastructure provision, there is an unstated but real requirement that the costs each user is liable for must be equitably shared and that the prices they pay are representative of the use they make of the shared facility.

Consumers see distribution pricing as an essential element of the AER regulatory reviews of DBs. Pricing is the allocation of the revenue streams into clearly identifiable elements so that consumers can readily see that the allocation of the permitted revenue is equitably allocated between all consumers representing the share of the cost of the provision of the

transmission network. The outcome of this approach provides for all consumers to see that they each pay their equitable share of the jointly used assets. It also provides certainty that decisions made by each user (such as location, time of and frequency of use, and overall demand placed on the network) are adequately recognised by the user, and that no one user is effectively supporting less rational decisions by another user.

Inappropriate pricing of services leads to inefficient outcomes. A user that is convinced that it is paying too much for the service will take a number of actions to reduce its costs, perhaps leading to nationally inefficient outcomes. The user that is not paying its fair share for the service undervalues it and makes inappropriate use of the facility. Over allocation of distribution costs can lead to companies deciding to relocate overseas or close down, causing remaining users to provide that contribution from the business ceasing its operations. Equally, under allocation of costs results in the proliferation of occasional users who do not recognise that impact of the decisions they are making.

Consumers have observed that DBs have an incentive to maximise prices in elements where they identify as the most likely to exceed the estimates for demand and consumption used in their development, and to minimise prices where elements are likely to be less than forecast. Gaming of the DB pricing is a fine art and can lead to very large rewards. Requiring prices to be cost reflective eliminates much of the potential to game pricing methodologies. It is imperative that the AER devotes considerable effort into minimising the incentive on DBs to game their pricing methodologies.

## **7.2 The Victorian DBs approach**

The package provided by Victorian DBs for its application does not detail the principles and methodology behind the development of the tariffs proposed. There are details about how tariffs might be varied and the side constraints that will apply.

The one exception to this, is the concept of the introduction of a summer day peak tariff, structured with the sole aim of reducing the demand spikes seen on hot summer days, when refrigerative air conditioners are operating at maximum output. The principle behind the concept is that high prices will encourage a reduction in usage, but when this is examined further, it raises some serious concerns for consumers. The cause of the demand spike is the increase in demand due to air conditioners, which operate in Victoria for relatively short periods of time. But at the same time as these air conditioners are being used, many other users are continuing their regular practices, especially those with a relatively flat profile.

Applying a peak summer demand to all users will penalize those not causing the problem, and encourage such users to reduce demand. Reducing demand by flat power users will increase the demand volatility for these

short periods and has the likelihood of reducing manufacturing output just to allow short term use of air conditioners – effectively to reduce national productivity just to keep some people cool. This is hardly economically efficient from a national viewpoint!

Others that will be negatively impacted will be the elderly, mothers at home with young children and the sick. Whilst the wealthy and fit will be benefiting from employer provided air conditioning in offices and shopping centres, those who need the benefit of cooling, will be beset by the need for some degree of comfort balanced against costs they are unlikely to afford. The tariffs structured need to reflect the reality of who will have to wear the brunt of such tariff pricing policies. The tariff structures proposed to achieve a reduction in peak summer demand have a strong appearance of imposing penalties rather than being cost reflective based.

The AER needs to ensure that the tariffs Victorian DBs develop are as close as possible to cost reflectivity as possible, and that gaming of the tariffs is minimised. The EUCV supports the ESCV approach used in 2005 to limiting the incentive for gaming of tariffs. In this regard the ESCoSA also achieved some reduction in gaming by the application of its Q factor approach. The EUCV recommends to the AER that it implements some form of control to limit tariff gaming, such as those proposed by ESCV and ESCoSA.

Victorian DBs have been involved in some demand side programs and have identified that some loads, when controlled, tend to reduce the peak demand in the system. Particularly remote control by cycling of refrigerative air conditioning and hot water heaters, have shown significant benefits.

The EUCV recommends that the AER either require Victorian DBs to establish tariffs encouraging the use of remote controlling of such loads, or to develop tariffs which recognise the true cost of providing a service which is used heavily but for relatively short periods of time, by targeting uncontrolled refrigerative air conditioning and swimming pool pumps.

As noted earlier, the bulk of the increase in demand is caused by the increasing use of residential refrigerative air conditioning. The requirements of the Rules require pricing to be cost reflective. This therefore requires Victorian DBs to develop pricing methodologies to recognise that those using refrigerative air conditioning pay for the increased demand resulting from their desire to use this service. Allocation of higher costs to those that have not caused the need for the augmentations to pay for refrigerative air conditioning (especially at a residential level) must be demonstrably avoided.