# Energy Users Coalition of Victoria

# **Australian Energy Regulator**

# **Victorian Electricity Distribution Revenue Reset**

## AER Draft Decisions and Revised Regulatory Proposals

on

# CitiPower, Jemena, PowerCor, SP Ausnet and United Energy Applications

# A response

by

# **Energy Users Coalition of Victoria**

# August 2010

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This requirement is that this submission must be considered to be a draft until the MCE has the opportunity to review it for accuracies of fact. The MCE review will take two weeks and when MCE approval is granted, the EUCV will advise the AER of any changes to this submission that are required by the MCE.

The MCE SCO has advised that it requires no changes to the draft submission and therefore this submission is now "final" and may be made public by publishing it on the AER website

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### Executive Summary

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

The EUCV supports the AER's draft decision on the regulatory proposals submitted by the Victorian electricity distributors (DBs)

By continuing to adopt the incentive regulatory approach taken by the previous regulators (Office of Regulator General – ORG – and Essential Services Commission of Victoria – ESCV) and assessing historical trends in performance of each DB, the AER has correctly assessed that the businesses are in "good shape" and are performing effectively, consistent with the regulatory allowances provided which have proved to be more than adequate for the DBs. The AER's final decision must strictly adhere to this approach.

Consumers have been concerned by the extent of the ambit claims in the DBs' regulatory proposals, as they are inconsistent with reality and past performance: that the Victorian DBs have responded to the regulatory incentives set by the previous regulators and are generally operating at efficient cost levels.

Such ambit claims – with the resultant massive increases in tariffs – will have adverse implications for downstream investments and employment and for residential customers, especially as they come on top of other cost increases occasioned by policy moves towards a carbon constrained economy.

The EUCV also urges the AER to reject what are still clearly ambit claims for opex and capex included in the revised regulatory proposals from the DBs.

The EUCV strongly supports the AER in its approach to move away from assessing claims for capex based on a predictive approach to one based on past performance of actual capex and the use of the Repex model. Moreover, the total capex that has been allowed by the AER should be seen as an ex ante allowance and the DBs have the discretion to substitute some projects for others, to defer some and institute new projects and to address new connections on an holistic basis in keeping with all other capex.

Despite some reservations about some elements, the EUCV considers that the AER has addressed the aspect of opex in a detailed and comprehensive way, continuing the approach instituted by the ESCV in the previous regulatory decision. The AER assessments have provided a well reasoned explanation as to what they have determined to be efficient levels of opex, as is required by the Rules.

The EUCV also comments on other aspects of the AER draft decision:

- The AER should have set targets for the levels of service delivery which would have incentivised the DBs to provide improved performance over the regulatory period.
- The AER should reject the DBs' renewed push to selectively change the WACC inputs (where a benefit will be accrued) but not others (such as those identified by the EUCV). The EUCV supports the principle that the WACC inputs are collectively set to provide a balanced outcome, so "cherry picking" needs to be eliminated.
- The EUCV opposes the draft decision to include the insurance event pass through as it is currently written.
- The AER should reject the revised DB claims for demand and consumption. Essentially the DBs consider their consultants are better positioned and more competent than the independent consultants commissioned by the AER. That the AER consultant's (ACIL Tasman) views are broadly supported by the AEMO assessments provide clear support for the AER considerations of forecasts of future use of the DBs' networks.

### 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 draft decisions relating to each of the five Victorian electricity distribution businesses and the related revised proposals from each business.

#### **1.2 The scope of this review**

The EUCV has observed that the AER has not only followed the requirements of Chapter 6 of the Rules, but has also followed the approach introduced by the ESCV in its 2004/05 review of the Victorian Electricity DBs. The EUCV sees that the AER approach provides not only a sound regulatory approach but one that provides regulatory consistency. Because of this the EUCV is fully supportive of the overall approach taken by the AER.

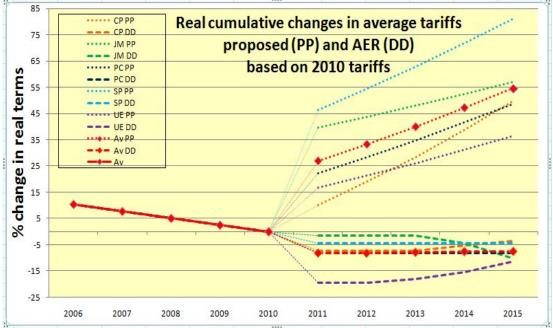
There is, however, an element of the Chapter 6 Rules which requires the AER to be more heavily involved in – this is the development of the ultimate tariffs and their pricing structure which will result in the AER having more involvement than in previous distribution reset reviews. Unfortunately, the AER has elected not to require the DBs to provide details of how the DBs will convert their allowed revenue into tariffs.

#### 1.3 A consumer overview of the AER draft decision

Consumers have been shocked by the extent of the ambit claims of the Victorian DBs' regulatory proposals and of the price shocks that will result if the claims are approved by the AER. The revised proposals regulatory proposals from the DBs are little different from the initial proposals, maintaining the significant ambit claims which, if allowed by the AER, will still result in large increases in tariffs that will have adverse implications for downstream investment (and associated employment) and for residential customers.

The AER final decision must strictly retain the approach used in the draft decision as consumers see the AER draft decision as a continuation of the widely accepted ESCV incentive regulatory approach used (along with the related rigour applied) in 2004/05 and the decision that resulted from that review.

The following figure depicts the movements in average tariffs arising from the AER draft decision. As can be seen the outcomes of the AER draft decision do show a clear continuation of the historical trends established by the ESCV which clearly reflects the appropriate efficient costs for providing the network services.



Source: ESCV FD, DB applications, AER DD

It is clear that the Victorian DBs all have responded to the regulatory incentives set by the ESCV and the Victorian networks are all in "good shape" and are exhibiting the effectiveness that was expected from the incentives provided. The DBs' regulatory proposals and revised proposals are clearly inconsistent with this reality.

#### 1.4 A share market overview of the AER draft decision

The AER draft decision leads to a significant reduction to the revenue claimed by the DBs. The impact on the share price for those DBs listed on the Australian stock exchange might be that shareholders would discount their share value if the draft decision was seen as providing too little revenue for the firm to be able to maintain or even improve the share dividend and/or growth.

Of the five DBs, four have associations with listed businesses – Powercor and Citipower (Spark Infrastructure – SKI), SP Ausnet (SPN), and United Energy (DUET - DUE). Spark represents nearly 50% of the DB assets, and SP Ausnet and DUET have other non related activities in their portfolios such as gas and electricity transmission and gas networks assets, whereas Spark has only ETSA Utilities as an adjunct asset. Comparing the share performance of Spark against the benchmark ASX S&P 200, provides a clear indication that the market sees the AER draft decision as benign at worst. The following chart shows the relative movement of Spark against the S&P 200.



Source: CommSec data

It should be noted that the AER released its draft decision after close of business 4 June 2010. Prior to that, the Spark share price was drifting lower. This trend continued for five days as the detail of the AER draft decision would have been absorbed and then shows a significant upward spike on the day after the Queen's Birthday public holiday. Since then the trend has been consistently upwards, indicating general acceptance by the market of the AER draft decision.

#### 1.5 An overview of the AER capex draft decision

It is quite clear that the Victorian DBs (like every network business in the NEM) had taken to heart that the new Rules over-incentivizes investment in distribution networks. Across the board capex demands were significantly inflated from the current period, as were opex claims. Against this backdrop, it should be 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.

To meet this massive increase in capital and operating expenditures, consumers would have had to pay considerably more.

But the massive capex and opex claims are inconsistent with the reality that the DBs have been effectively providing network services at current levels of capex and opex – and this sudden leap in expenditure claims in light of the AEMO projections in demand and consumption are totally at odds with the actuality of the DB performance over the past decade and more.

Notwithstanding the general support for the approach the AER has taken, the EUCV points out in its detailed assessment of the capex and opex (sections 2 and 3) that the AER has made errors in regard to the way it has looked at expected future movements in wage and material costs as they are over generous to the DBs.

#### **1.6 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>1</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 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.

<sup>&</sup>lt;sup>1</sup> AER Explanatory Statement, Proposed Electricity distribution network service providers efficiency benefit sharing scheme, April 2008 (page 4)

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 in this current review is a campaign to convince the AER that opex must be consistently increased at each regulatory review. In particular, we see 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 (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.

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.

#### **1.7 The Efficient Revenue Requirement**

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 revision of 2005:

"...the national electricity market objective in the new National Electricity law is to promote efficient investment in ... electricity services ... For example, investment in and use of electricity services will be efficient when services are supplied in the long run at least cost..., 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).

In the second reading speech on amendments to the NEL and NER in 2007, (which introduced the concept of the propose/respond model of regulation)

the theme of efficient investment – whether in capex or opex – is further developed. The amendments make specific reference to six principles to be applied to regulation. These six principles are:

- 1. A regulated network provider should have a reasonable opportunity to recover at least the efficient costs of the service provided
- 2. Service providers should have incentives to promote economically efficient investment and use of the network
- 3. Regulators are to have regard to the regulatory asset base adopted in previous regulatory decisions
- 4. Prices and charges should provide a return commensurate with the risks involved
- 5. The regulator has to have regard to the costs and risks associated with under and over investment by service providers
- 6. The regulator has to have regard to the costs and risks of under and over utilization of the network.

The concept behind principle 2 is that by providing incentives to network providers, they will reveal their efficient costs. This is developed later in the speech where the Minister stated:

"A key feature of the rules is the ability for the Australian Energy Regulator to develop incentive schemes around capital and operating expenditure efficiency, service standard efficiency and demand management. These schemes can be tailored to consider the unique circumstances of the network service provider during the Framework and Approach phase of the regulatory process. In developing the schemes, the Australian Energy Regulator is guided by principles including that it must be satisfied that the application of a scheme is likely to result in future benefits to customers sufficient to warrant the payment of any rewards to the service provider. The schemes are in addition to the minimum service standards and other guaranteed service level arrangements in place through other jurisdictional instruments".

The import of this is that there is a clear intention behind the amendments that the regulator must reach a balance between the conflicting elements of the Rules, in order to identify the most economically efficient outcome in "...the long term interests of consumers."

There is a recurring theme in all of the five revised proposals from the DBs that the AER was incorrect in not accepting the recommendations of cost allowances for the businesses because the businesses considered they were able to identify that their recommendations were efficient. What they all fail to reveal was that their historic performance was measured against a framework established by the ORG in the 2000 decision, and continued by the ESCV in the 2005 decision, where the businesses were and still are incentivised to deliver improved economic efficiency.

Because of this continuing incentive framework over two regulatory periods, the AER rightly and clearly identified that the historic performance of the Victorian DBs over a decade is an essential element of its review, and that the benchmarks achieved by each DB must have primacy over the estimates of capex and opex the DBs considered they were entitled to.

The revised regulatory proposals all highlight that the AER has granted very large increases in capex and opex in NSW and Queensland, and to a lesser extent in SA. No electricity DB has been subject to an incentive scheme to increase efficiency other than the Victorian DBs (ETSA in SA has only been subjected to an incentive scheme for one regulatory period) so the comparisons made by the Victorian DBs are invalid.

Essentially, self benchmarking, where an efficiency scheme has been in operation, provides the best indication of whether costs are efficient. There is no doubt that the Victorian DBs have all responded to the regulatory incentives implemented by the ESCV, and all are showing they are operating at effective levels. As a result the AER has a responsibility to ensure that costs continue to be driven to efficient levels, regardless as to whether the propose/respond model of regulation allows the service provider to set its preferred costs.

The revised proposals point to the AER decisions for other DBs and the AER's acceptance of most of the costs proposed. This acceptance of the increased costs by the AER is not necessarily an argument that it should agree automatically that the costs proposed by the Victorian DBs must be considered efficient as well. In fact, there are at least two other scenarios that such an argument totally overlooks :

- 1. The AER might have erred in its earlier decisions in NSW and Queensland
- 2. The AER has now done what the ORG did in 2000, and allowed significant increases in allowances for opex and capex but at the same time inserted an incentive mechanism for the businesses to drive for increased efficiency.

The results of the inter-relationship of incentives and outcomes have been clearly demonstrated by the AER in section 18, particularly Figure 18.1:

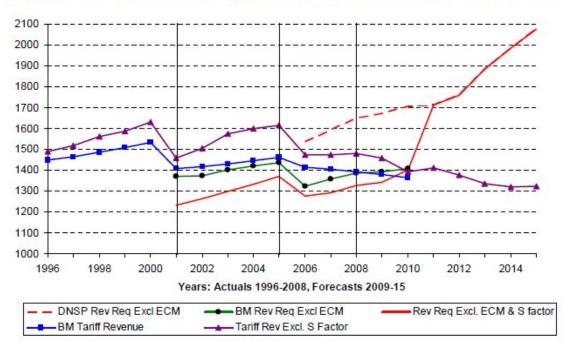


Figure 18.1 Building Block cost and revenue profile for Victorian DNSPs (\$'m, 2010)

Source: AER analysis

Here the AER points out that consistently the Victorian DBs in aggregate had achieved a revenue stream in excess of the target revenue seen as appropriate by the ORG and ESCV. At the same time the costs of providing the service were consistently and significantly below the costs seen by the regulators as needed to provide the service. This outperformance was noted by the ESCV in its EDPR documents in 2004/05 and led the ESCV to be more attentive to ensuring there was less excess revenue and less under-run in costs than had occurred in the previous regulatory period.

The AER is correct to assess the historic performance of the Victorian DBs as this provides the regulator with appropriate information (such as unit costs) to assess the proposals in the current review.

If the AER agrees to the Victorian DB proposals without assessing historic performance when under an incentive scheme designed specifically to lead to a more efficient outcome, then the reason to have an incentive scheme would be pointless and not meet the intention of the amendments in the 2007 NEL changes. In any case, the NER requires the AER to have regard to historical costs.

#### 1.8 Summary

Overall, the AER draft decision is a well researched and detailed review of the costs needed to provide the services required under the regulatory bargain. It has used a well proven approach initially established by the ORG and developed by the ESCV in previous regulatory decisions. The move to use the actual performance of the DBs as the basis for setting opex and capex is seen as an appropriate outcome of the implementation of an incentive regulatory approach.

### 2. Total Ex-Ante Capital Allowance

#### 2.1 An overview of the Victorian DBs capex claim and the AER response

In its response to the applications from the DBs, the EUCV commented on the constraints facing the electricity transport businesses in implementing their capex proposals. The EUCV 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 AER and its consultant (Nuttall Consulting) have provided one of the most detailed reviews of proposed capex carried out by the AER in relation to electricity distribution reviews. The (commendable) analysis by the AER and Nuttall showed both a top down review and a bottom up assessment of specific projects, their need in relation to increases in demand, and the potential for deferment and non-network solutions.

Both the AER and Nuttall were assisted in this task by the high degree of analysis provided by the ESCV in the 2005 review, and the maintenance of sound historical information.

The EUCV notes that there is a long term trend of a reducing load factor in electricity transport networks, where demand is increasing faster than consumption. The AER makes a telling point where it highlights that the introduction of the Advanced Metering Infrastructure (AMI) roll out will in future provide the DBs and the AER with much more accurate information on where and when electricity demand and consumption occurs. This data will provide a much stronger basis for analysis of capex needs in the future.

Despite the very large capex claims made by the DBs (following the example set by the NSW DBs and then followed by the Queensland and SA DBs), the AER has, with the benefit of a strong previous regulatory review by ESCV and greater transparency, examined in more detail the claims made by the Victorian DBs and then compared the new claims in light of previous capex performance and the service standards achieved with the actual capex used by the DBs.

As a result of the bottom up analysis by Nuttall, the review of past performance in each element of the capex claim to provide benchmarking and combined with a detailed analysis of service performance, the AER has implemented a multi-focus approach to the DB capex claims. The outcome of this detailed assessment has delivered an outcome that reflects the historic trends for capex needs.

#### 2.2 Self benchmarking must be used to set future capex

The EUCV has long been a supporter of using past performance as the basis for developing the basis for future needs. In fact, such an approach is the very basis of incentive regulation, where the incentives provided lead to the most efficient outcome. In the past two regulatory periods, the approach by the ORG and then the ESCV was to allow the DBs to retain the benefits of any capex under-run, and by doing so developing a trend for capex needs which seek to reflect the most efficient outcome for consumers.

The AER provides a series of figures (figures 8.17 to 18.21) in its draft decision. These provide a telling story of high claims by the DBs over the last two regulatory reviews, lower allowances provided by the ORG and ESCV, and even lower actual investments by the DBs.

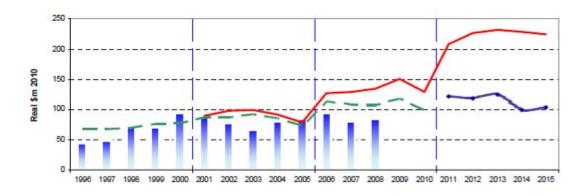
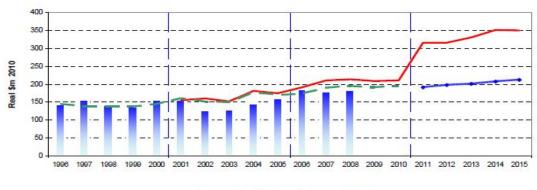
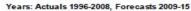


Figure 8.17 CitiPower's draft decision capital expenditure (\$'m, 2010)

Years: Actuals 1996-2008, Forecasts 2009-15

Figure 8.18 Powercor's draft decision capital expenditure (\$'m, 2010)





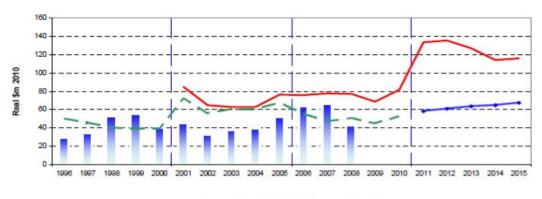


Figure 8.19 Jemena's draft decision capital expenditure (S'm, 2010)

Years: Actuals 1996-2008, Forecasts 2009-15

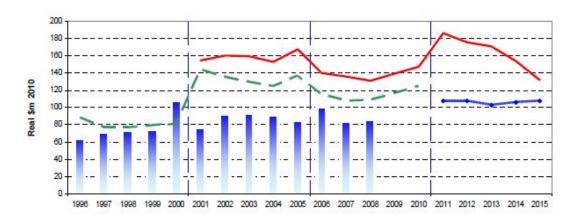


Figure 8.20 SP AusNet's draft decision capital expenditure (\$'m, 2010)



Years: Actuals 1996-2008, Forecasts 2009-15

Figure 8.21 United Energy's draft decision capital expenditure (\$'m, 2010)



Years: Actuals 1996-2008, Forecasts 2009-15

Actual capex \_\_\_\_\_DNSPs forecast capex \_\_\_\_ ESCV allowance \_\_\_\_AER draft decision allowance

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There is a recurring theme in these figures:

- Over the past two regulatory periods, the regulators (ORG and ESCV) have consistently determined that the claims made by the DBs are unwarranted and need to be reduced
- Despite the lesser amount of capex awarded by the regulators, the DBs have consistently used less capex than the amounts awarded by the regulators
- For the bulk of the time, the DBs provided less capex than was allowed, and only nine times out of a total of 65 DB years (ie 14% of the time) did the actual capex exceed the allowance
- On average, every DB has invested less capital than was allowed for by the regulators

Because the DBs have invested less capital than consumers were required to pay for, the DBs have all been the financial beneficiaries of investing less capex than was allowed. Incentive regulation recognizes that this could occur but to offset this cost to consumers, the DBs provide a more efficient approach to real capex needs moving forward. If the DBs provide a consistent level of service (which they have done) then the regulatory bargain is achieved.

There is one major caveat to this approach of consumers paying for unused capex – that is at the next regulatory review, the regulator must recognize that actual capex (ie self benchmarking by each DB) provides a clear indication of future needs.

#### 2.3 What triggers the differential between claims and actuals

In its final decision in 2005, the ESCV commented on the disparity between the forecast capex and the actual (lower) capex actually incurred. The ESCV identified (page 255):

"The fact that capital expenditure has been lower than forecast may be due to a combination of factors:

- efficiency gains achieved over the period;
- the deferral of capital expenditure projects between regulatory periods;
- changes in external drivers of expenditure, for example lower than anticipated peak demand; and/or
- the overstatement of capital expenditure requirements at the time the previous benchmarks were set."

If efficiency gains are achieved then the benefit of lower future capex should accrue to consumers as this is the core element of incentive regulation.

If projects are deferred, there is the risk that consumers might pay twice for the same project, but despite this, the incentive implicit in the regulatory approach should still lead to a benefit to consumers in the long term.

If the cause of the capex under-run is related to changes in external drivers (such as lower demand) then this is a failure by the regulator in setting the appropriate assessments for external assessments. In this regard, under the price cap approach to regulation, the risks to the business are mitigated by the higher return they get from higher than planned for demand and consumption. Because of this the regulator needs to take a less conservative view of future growth than it might under a revenue cap approach to regulation.

The most common cause for actual capex being lower than the capex claimed by the businesses, is the desire to receive an unearned benefit. This is a direct result of the incentive regulation, that a DB will retain the benefit of the difference between the allowed capex and the actual capex. The ACCC looked at this issue in 2002 in its final decision on SA's ElectraNet where the ACCC, due to concern that the claimed capex was excessive, allowed for there to be a "clawback provision" to reduce the impact of unused capex. Regulators have declined to implement this clawback approach in other later regulatory decisions.

In its decision in 2005, the ESCV took the view that past actual capex is a good indicator of future capex, and implemented this approach in its decision. In this draft decision the AER has decided (correctly in the opinion of the EUCV) to follow the example of the ESCV to use the previous performance of the DBs in relation to capex, as the basis to set the capex for the next regulatory period.

#### 2.4The AER Draft Decision

In figures 18.17 to 18.21, the AER draft decision on capex is also shown. By and large the AER draft decision on capex for each of the DBs, shows the allowed capex is trending on the same path as the ESCV final decision made in 2005. This shows consistency in regulatory approach, even though the AER has also completed a bottom up assessment of a number of aspects of the DB claims for future capex.

Of equal importance the AER has also incorporated into its assessment its views of future demand trends and service standards, as both of these elements need to be consistent with the capex allowance. As neither the trends in demand and service standards show a need to deviate significantly

from those trends identified by the ESCV in the 2005, it is expected that the capex outcomes and trends would be consistent with the ESCV decision.

In its detailed assessment and analysis the AER carried out reviews of a number of elements of the capex build up, viz:

#### 2.4.1 New customer connections and growth of the networks.

The AER correctly in the view of the EUCV identified that the growth of the networks to serve new customer connections is a continuing feature of the networks and the trends for the next regulatory period are similar to those in the past. On this basis and because the DBs did not provide sufficient support to warrant an increase in allowances the AER did not consider that an increased allowance is warranted for new connections.

#### 2.4.2 Reinforcement of the networks.

The AER, again quite correctly in the view of the EUCV, identified that the historic capex applied by the DBs to reinforcement of the networks, has provided a sound indication of the trends of the need for reinforcement. Additionally in the current period the DBs significantly over forecast their needs for reinforcement and then underspent the allowance granted by ESCV.

Because of the concern that the DBs had requested so much more reinforcement capex, the AER had its consultant examine reinforcement capex needs both on a top down and project (bottom up) basis. Combined with the view of Nuttall, the AER came to the conclusion that based on historic trends and a view as to the likelihood that some identified projects are not required during the next period, the reinforcement capex claims were significantly over stated compared to the need for the capex to maintain reliability based on historic trends and actual activities of the DBs.

Nuttall found that the applications by the DBs showed a number of issues where a prudent and efficient network operator might not proceed with the capex, many of them recurring in the different DB assessments, such as:

- The key input assumptions for the forecasts of future demand were overstated
- Project timings were potentially too early to match the foreseeable risks
- Economic benefits from reduced supply risk do not outweigh the project costs (ie application of the regulatory test)
- There was potential for lower cost options to network investment that had not been better investigated

A key aspect of the Nuttall review was to assess the probability for the need for the capex claimed. This element of the AER review is extremely

important as the capex claimed is assessed on a probabilistic approach rather than the previously used deterministic approach where specific projects are seen as essential for the next period.

That the DBs in their revised proposals have in part reverted to use a deterministic approach to provide support for their arguments, only provides an attempt to cloud the clarity and common sense approach used by Nuttall and the AER in assessing reinforcement capex

#### 2.4.3 Reliability and Quality Maintained (RQM) capex

In response to the AER draft decision, the DBs have raised concerns that the Nuttall approach (based on the AER Repex model) is limited in its application. In particular, the DBs in their revised proposals point out that the Repex model has been incorrectly applied, and that it is more based on age determinants than on an overall conditioned monitored basis.

The EUCV and its affiliates have consistently been concerned that DBs use condition monitoring to provide solutions that retire assets earlier than their actual performance would warrant. As the regulatory approach provides an incentive for networks to replace assets as soon as their economic life is over (ie that they are fully depreciated out of the RAB and no longer generate a return to the network owner) then the useful life of the asset is curtailed prematurely. Condition monitoring, whilst intended to recognize the useful life of an asset, can also be used for early retirements.

What the DBs have overlooked themselves, is that consistently they have claimed more RQM capex than they ultimately used and invested less RQM capex than they were allowed by the ESCV. At the same time service standards were maintained. The AER forecast allowances continue the trends set by the DBs themselves whilst gaining a benefit by not using the full allowances they were provided with.

The fact that the DBs all provided less RQM capex than they claimed in the past provides a clear statement that they consider the RQM capex claims they made in the past were grossly inflated. The AER decision merely highlights this and recognizes the reality of the RQM capex needed, as identified by the DBs themselves.

The DBs then sought input from PB and NERA to assess the Repex model, and concluded that the repex model was inappropriate for assessing whether assets need replacement or not. What they all seem to overlook is that the AER has used the Repex model to develop a capex allowance to be integrated into the regulated revenue, and not to develop a deterministic approach to asset replacement. It must be remembered that the DBs are still able to replace assets as and when they consider it necessary, but if they

#### exceed the capex allowance, they will have to wait until the next regulatory period to get a return on the cost of the asset used for the replacement.

Whilst the EUCV does not have the full details of the principles behind the repex model, it is of the view that an **independent approach that uses historic data** as a key element of generating capex needs, provides sound guidance to setting the allowances consumers should be required to pay for.

#### 2.4.4 Environmental, Safety and Legal capex

There have been no changes in external regulatory requirements in the areas of environmental, safety and legal that would constitute a step change, so there is no doubt that the capex needs for these elements are already embedded in the historic capex.

In its 2005 review ESCV did examine step changes in these areas and made allowances for changes that had occurred. Therefore the AER approach of not allowing increases in these areas is correct.

#### 2.4.5 SCADA, network control, IT Other

The approach taken by the AER to setting the other elements of the capex program are detailed, robust and reflect the actuality of what the DBs themselves considered to be appropriate investment in these areas.

#### 2.4.6 Other causes for capex needs

The AER addressed, in particular, two other issues of significant concern to the DBs – the outcomes of the Victorian Bushfire Royal Commission (VBRC) and the impact of climate change.

The AER proposes that (especially for Powercor and SP Ausnet) any outcome from the VBRC review should be treated as a potential pass through. The reasons given for this are sound, and in light of the recent release of the VBRC final report and the initial response by the Victorian Government to it, the AER view is wise. In the report the VBRC recommends (amongst other things) that:

- some overhead power lines should progressively be made more safe by undergrounding, bundling or other approach to reduce bushfire risk
- inspections of some overhead power lines be inspected more rigorously and more frequently
- More attention is paid by councils and DBs to vegetation and "hazard trees"
- Spreaders and dampeners be fitted to some power lines

The Victorian government has highlighted there will be significant cost in implementing these and other recommendations and has reserved its position as to whether and when it might require the implementation of the "electricity-caused" and other recommendations. There is little doubt that these and other recommendations of the VBRC will be implemented, at least in part over time but, as the costs to implement the recommendations will be very large, the extent and timing of the bushfire recommendations is still to be determined. Until some certainty as to what of the recommendations and over what time period they are to be implemented, to build capex allowances into the determination is extremely premature.

Equally, as there is likely to be some cost to the DBs as a result of implementing the VBRC recommendations it is appropriate to allow the DBs the funds to carry out such work when the details are clear. Because of this, the pass through approach is supported by the EUCV.

The AER quite rightly rejected the applications of the DBs to increase allowances as a result of the AECOM reports on the effects of climate change

#### 2.5 Real cost escalators (see also section 3.3.2)

The AER considers that capex and opex allowances should be adjusted to reflect that in real terms the cost of materials and labour move at rates different to the CPI which is the basic adjustor for the revenue allowed to a network service provider. In regard to opex the AER noted in its Draft Decision (page 224) that:

"...the assumptions used to develop the opex proposal, including unit cost estimates, scale escalation assumptions, real costs escalators, forecasting methodologies and modelling approaches, are robust and likely to produce opex forecasts which are prudent and efficient and a realistic expectation of cost inputs required to meet the opex objectives."

The clear import of this observation, is that the outcomes will represent efficiency and will be prudent. The EUCV is not convinced that the AER in implementing their approach, actually achieve efficiency or prudency in relation to the application of real cost escalators to capex and opex.

To recognize that there is a basic adjustment for inflation as measured by the CPI, the AER allows for forecasting to develop what the various escalators will be over the regulatory period. In appendix K of its draft decision the AER comments (page 118) that it:

"... acknowledges the EUCV's concerns [about cost escalators] but does not consider a departure from its current approach to materials input cost

escalation is appropriate. The EUCV notes that the prices of some materials have fallen significantly to the point where they are much closer to long term averages.24 The AER considers that its methodology for estimating input cost escalation rates (see section K.3.3) ensures that the most recent data on prices is reflected in its decisions.

The AER also notes that negative escalation rates have and will be applied where costs are forecast to decline. This approach ensures that all Victorian DNSPs experience upward and downward pressure on prices.

The AER agrees with the EUCV that the Victorian DNSPs should identify the amount of capex attributed to materials escalation. The AER notes that this was a requirement of the Regulatory Information Notice (RIN) that all the Victorian DNSPs were required to comply with as part of their regulatory proposals. The AER sought clarification from the Victorian DNSPs on the information provided and requested additional information during the review process."

The EUCV acknowledges that the AER is attempting to provide a reasonable cost escalator to the DB allowances to recognize the costs the DBs will incur over time. Where the EUCV departs from the AER approach, is that the forecasts are demonstrated to be uniformly wrong, and by attempting to address a real concern has introduced more conservatism into the allowances the AER wants consumers to pay.

Historically regulators assumed that over time, providing for inflation in the allowed revenue stream would accommodate the variations seen in cost escalators for materials and labour. For the general economy this must be a correct assumption as this is the basis of adjusting for inflation, and the most common measure of general inflation is the Consumer Price Index. The CPI is used widely as the basis for inflation in many contracts for provision of materials and services in Australia and was used by the AER even as late as June 2007 where it assumed the CPI adjustment would reflect the movement in materials costs in its Powerlink decision.

The AER has expressed a concern that the CPI adjustment needs to reflect more accurately the movement in costs the DBs actually face, and as a result the inflators now include a range of specific materials and labour in the EGW sector. In theory such an approach has some merit, but in practice it introduces severe errors because the adjustments are made on an ex ante basis. Whereas most contracts for provision of materials and services are based on costs applying now and are adjusted at a point in the future when inflators are known, the AER uses CPI to adjust revenue at a point in the future and tries to include forecasts of real cost escalators now.

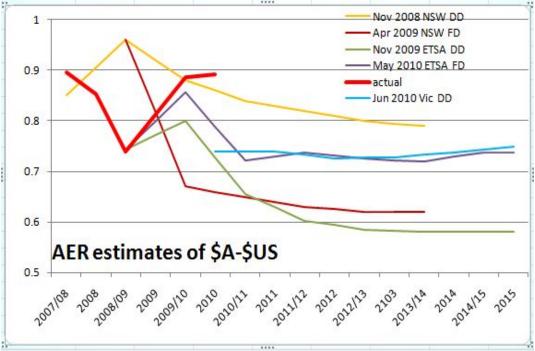
To overcome the EUCV concerns with poor forecasting of future escalators, the AER would better serve consumers if they introduced a formula for

adjusting revenue in the future which recognized movements in appropriate materials and labour costs and cease using the CPI as the revenue adjustor. This would remove the need to forecast future "real costs" now and reduce one very contentious computation.

#### 2.5.1 Exchange rate variations

Exchange rate variation is such an issue. For example, in recent times the AER has had to forecast the \$A/\$US exchange rate for the ETSA draft and final decisions and the Victorian draft decision. The AER has attempted to use the best information available to it at the time, but it is clear that such forecasts show extreme volatility and are likely to be incorrect later in a regulatory period

The AER forecasts can be shown graphically as shown, along with actual exchange rates.



Sources: AER decisions, RBA

The EUCV has used the exchange rate as the basis for this example as the \$A-\$US is an essential element of calculating steel, copper, aluminium and oil prices, but similar variations are seen over time for these other materials..

The purpose of developing such a chart is not to show the AER is poor at forecasting and that its forecasts vary dramatically over even short periods of time, but to highlight that the AER approach provides great variance and as a result will either provide a large benefit or a large detriment to the DBs over the course of a five year regulatory period. What is also clear from the chart is that the AER estimates are more

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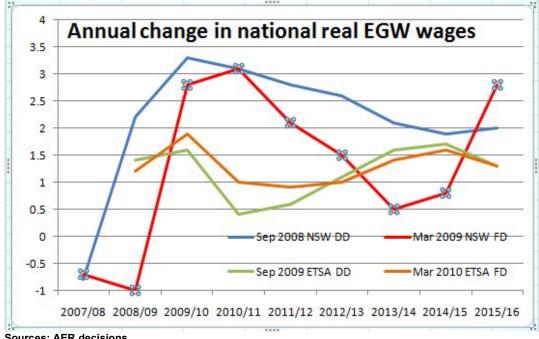
biased to conservatism (ie providing an unearned benefit to NSPs) than just of keeping the NSPs "whole" at a time in the future.

To highlight the obvious inconsistencies, the \$A is currently tracking an average of nearly \$US0.90 for 2010 yet over time, the AER has forecast the exchange rate of 2010 as low as \$US0.66 for the NSW FD. This means that the NSW DBs will receive a massive unearned benefit for material purchased this year but would have seen in 2009 a significant detriment for materials it procured in 2009.

Even between May of 2010 and June of 2010 (just one month in time difference) there are clear variations in the forecasts of this exchange rate.

#### 2.5.2 Wages escalation

Tracking real wages growth in a similar fashion to that used for exchange rate forecasts, shows that the same error seen with exchange rates using the "best forecasts available at the time" is seen in relation to real wages growth for the EGW sector. The following figure depicts this clearly.





Each time the AER provides a draft or final decision, it produces the "best available forecasts" of real wages growth in various wage groups applicable to the employees of the Utilities sector of electricity, gas and water supplies.

The plot of the values used in each decision show that over time the forward estimates show considerable variation, highlighting that at any point in time, at least one AER decision will be incorrect, causing a loss or gain to the regulated business.

As with the exchange rate example, it seems that there has to be introduced a method to remove this volatility and variations over time

#### 2.5.3 The Fallacy

The one thing that these examples show is that even if the AER is correct for one of its decisions, it must perforce be wrong for other decisions. Effectively the AER is building in errors into its allowances in a vain attempt to provide an ostensibly more accurate outcome.

The purpose of going to such lengths of forecasting future trends is supposedly to improve the accuracy of the costs a NSP will receive in the future – in order to keep the NSP "whole" in terms of cash for approved tasks. In principle the concept is sound, but in practice, the concept cannot be delivered.

In attempting to be more accurate of future costs, the AER has introduced major errors that have the potential to swamp the improvement in accuracy such an approach should in theory bring. In accepting such volatility and inaccuracy as has been portrayed, the AER has not provided an outcome that is in the long term interests of consumers or of the network service providers.

This highlights that the AER has attempted to increase its accuracy in future allowances without understanding that the very method it is using creates greater risk and less accuracy over the long term. What is even worse is that where there is inaccuracy, there is a tendency to be conservative in forecasts. This bias is to the benefit of the DBs at a cost to consumers.

To a degree this false approach is driven by an AER decision to base all future revenue movements in accordance with the CPI. If the AER decided that future revenue adjustments were to be based on another inflator (such as a formula containing a number of variables – an approach used extensively in the construction industry) and declaring the outcome as the inflation adjustor for each year rather than using the CPI, then all of this inaccuracy could be eliminated.

This approach would mean moving away from using CPI adjustors each year to an adjustor which the AER would administer which includes inflation adjustment for specifically defined cost elements. The AER would publish the "energy industry inflation adjustor" each year and the tariffs would be adjusted in line with this figure rather than using CPI as is the current practice.

Whilst clause 6.2.6 of the Rules seems to imply that the escalator for standard control services must be based on the CPI (which is a defined term) the definition of CPI allows that the AER may implement "...such other index as is determined by the *AER* as a suitable benchmark for recording general movements in prices" in the event the CPI is no longer published or is substantially changed.

The clear import of the definition is that the AER could address this aspect of attempting to forecast labour and materials cost inflation readily and accurately, without exposing consumers and DBs to risks of unforeseen changes in cost movements, and without the need to insert conservative forecasts.

#### 2.5.4 Wages Productivity

In its response to the draft decision of the AER review of ETSA Utilities, the ECCSA commented that the AER must recognize that over time, there is a natural increase in productivity of labour that on a national average reflects the difference between inflation as measured by CPI and wages growth. That this must be true, cannot be gainsaid as historically wages have shown a premium to the CPI of between 1-2%. If this trend remained in place and there was no increase in productivity, then wages would have far outstripped inflation by many times. The AER seems to acknowledge this observation when it commented in place 133 in the appendices to the draft decision for the Victorian DBs:

"The AER considers that productivity adjustments can be an important factor in forecasting actual business costs and notes this approach is consistent with previous regulatory decisions.<sup>82</sup> The AER further notes that Access Economics considers productivity factors as a key driver of wage differentials and has incorporated productivity into its modelling.<sup>83</sup> The AER supports the application of Access Economics' productivity impacts in the modelling of its wage cost growth forecasts and does not consider it necessary to include further productivity adjustments. The AER considers Access Economics wage cost growth forecasts reflect a realistic expectation of labour costs."

However in the table the AER used for EGM wage growth over the ETSA regulatory period, it used the following amounts (page 327)

Table K.15	Access Economics proposed Victorian EGW labour real cost escalators
	(per cent)

	2010	2011	2012	2013	2014	2015
EGW LPI	1.3	1.1	1.0	0.9	1.9	1.5

Source: Access Economics, Forecast growth in labour costs: March 2010 report, 16 March 2010, table 6.4, p. 60.

In contrast Access Economics provided the AER with two sets of tables – one with productivity and one without (see page 60 of the Access Economics report dated 16 March 2010) used by the AER for the Victorian draft decision

Calendar year changes in Victorian real Labour Price aggregates

Annual % change	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Victoria	1.8	0.1	1.2	1.0	1.0	2.0	1.4	1.3	1.2	1.3
Utilities	3.1	1.3	1.1	1.0	0.9	1.9	1.5	1.4	1.3	1.3
Mining	2.4	0.2	1.5	1.6	1.5	2.5	1.9	1.8	1.6	1.6
Construction	3.9	1.7	1.3	0.8	0.8	2.4	1.8	1.2	1.1	1.6
Manufacturing	1.0	0.9	1.7	1.5	1.3	2.2	1.7	1.6	1.5	1.4

#### Calendar year changes in Victorian real productivity adjusted Labour Price aggregates

Annual % change	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Victoria	2.4	-0.5	-0.4	0.3	-0.4	0.0	-0.2	-0.5	-0.8	-0.
Utilities	2.7	0.9	0.0	0.1	-0.6	0.3	0.4	0.2	-0.3	-0.3
Mining	1.7	0.1	0.2	0.5	-0.1	0.8	0.6	0.3	-0.2	-0.
Construction	3.7	1.7	0.0	0.1	-0.5	0.6	0.5	0.3	-0.3	0.0
Manufacturing	1.1	0.2	0.3	0.2	-0.5	0.4	0.3	0.1	-0.5	-0.4

What this shows is that the AER has used Access Economics data **without productivity adjustments** in its draft decision whereas it should have used the productivity adjusted rates if it was to be included for the expected increases in productivity.

As can be seen, the productivity adjusted rates show a significantly lower wage cost growth expectation than the rates without productivity adjustments, which is what would be expected.

In previous ESCV decisions (as with other regulators), the regulator inserted specific productivity gains into the opex and capex forecasts for labour inputs.

The AER needs to address the inconsistency between professing that productivity gains must be included and effectively excluding them by using expected wages growths without including the expectation of productivity improvements.

#### 2.6 Summary and conclusions

The Victorian DBs (like the NSW, Queensland and SA DBs) made claims for massive increases in capex for the next period, eg equivalent to increasing current actual capex by some 50%. They 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 therefore at an efficient level as the Victorian DBs have consistently underspent on capex allowances for more than the past decade 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 needs for increased reliability and quality are unchanged from the current period, indicating there is no need for increased capex to achieve increased reliability and quality in service
- The Victorian DBs have not sustained an argument that they are subject to increased safety requirements (other than perhaps bushfire management) and therefore it is clear that these costs should be much the same as in the current period

After a detailed review of the actual capex incurred to date and the proposed capex, the AER and its consultant have come to the conclusion that the future needs for capex are much as in the current period. In reaching this view the AER recognizes that as the Victorian DBs have all been subject to incentive regulation for over a decade (and therefore are operating at efficient cost levels), it is their actual performance in terms of their needs that is the overarching determinant as to the capex needs of the new regulatory period.

In their responses to the AER draft decision, the DBs all predictably were critical of the AER approach and the outcomes of the AER assessments of their proposed capex. In particular the DBs all were critical of the AER Repex model for assessing RQM capex, as well as of the AER use of their own past capex performance as a guide to future needs.

The EUCV strongly supports the AER in its approach to move away from claims of capex needs not based on a predictive approach but based on past performance using the Repex model and actual capex. The EUCV has seen that over time consumers have incurred higher costs that might be necessary due to the DBs all claiming amounts of capex much higher than they actually use and less than the amounts the regulators have allowe3d to be included in allowed revenue.

Consumers have in the past paid an incentive to achieve greater efficiency in the previous regulatory periods and this is now bearing fruit. By the earlier regulators allowing the DBs more capex than they actually needed (that this is true is demonstrated by the fact the DBs have consistently under-run capex allowances), this has resulted in the AER now being able to use the DB's actual performance as the basis for forecasting capex needs against the clearly exhibited trend, rather than allowing the DBs to continue to accrue benefits by grossly overstating their capex needs in the hope of getting higher capex allowances.

The DBs in their revised proposals make an issue about whether the AER and Nuttall are correct in using a probabilistic assessment in assessing reasonable capex allowances. If the DBs themselves see that a probabilistic approach is appropriate to capex rather than using a deterministic approach, then they should recognize that the extension to a probabilistic approach as used by Nuttall and the AER is not only acceptable but appropriate in setting the allowed capex.

In this regard the DBs are not constrained to use more capex if they deem it necessary. The AER draft decision does not set how much capex the DBs can invest over the next period, only the amount that the AER will require consumers to pay for over the period. Even if the DBs spend more capex than the amount assessed by the AER as appropriate, the NER allow the DBs to roll in the actually incurred capex in the next regulatory period. Thus the risk for the DBs of an overspend is smaller for the DBs than the risk of an underspend to consumers who will be required to pay (as they have for the past decade) for something that was never provided.

As an overall observation the AER has quite rightly pointed out the total capex that has been allowed is an ex ante allowance and the DBs have the discretion to substitute some projects for others, to defer some and introduce new projects, and to address new connections on an holistic basis in keeping with all other capex.

All the DBs are critical of the AER approach, stating their claims should be accepted without criticism or amendment. SP Ausnet, for example, points out the AER is inconsistent with its treatment of the Victorian DBs in contrast to other DBs in the NEM. In their revised proposal they point out the AER was much more prepared to accept increases in capex for the other DBs and provided the following figure showing the extent of the "leniency" granted to others.

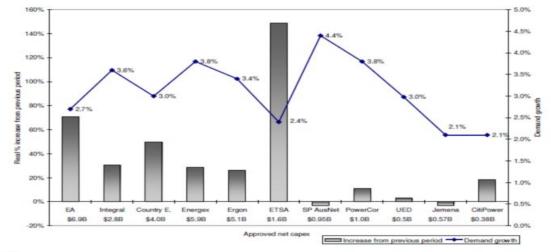


Figure 6.3: AER Net Capex Decisions across the NEM (real 2010\$)

Notes:

(1) Victoria's figures are from the AER Draft Determination while all others are based on AER Final Decisions.

(2) Victoria's current expenditure based on 2006-08 actuals and expected 2009-10 expenditure as per Regulatory Proposals.

In some ways the EUCV can see that the AER has granted more increases to other NEM DBs than to the Victorian DBs but in making this assessment SP Ausnet has overlooked two aspects

- 1. The AER might have been wrong in the allowances given to the other DBs (and this is the view of EUCV affiliates and other consumer advocates)
- The Victorian DBs have been subject to active incentive regulation longer than any other NEM DB and therefore should be the first to have the benefits of the incentives they have enjoyed for so long, be used to demonstrate efficiency of the capex programs they themselves have implemented and enjoyed the benefits of.

The main area of EUCV disagreement in the AER approach to the capex assessment is the AER approach to forecast future movements in materials and wages. The EUCV sees the reasons behind the AER approach but considers the implementation introduces so many risks, inaccuracies and unnecessary costs to consumers that an alternative approach should be examined. The AER could quite easily provide a formula based inflator for adjusting revenue allowances as an alternative to using CPI (the construction industry uses this approach). The impact of providing the intermediate step introduces unnecessary costs and risks.

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### 3. Forecast Operating Expenditure

The AER is required to establish a level of opex for an NSP which is efficient and prudent. What is frequently overlooked is that what the AER sets is an amount of opex which the DB will be allowed to include in the tariffs the DB is allowed to charge. The AER is not required to set the amount of opex that a DB will actually require in the course of the regulatory period. The amount of opex the AER allows to be included in the tariffs must represent a level of efficient opex and be based on a prudent assessment.

To this end the ORG initially in the 2000 decision and developed by the ESCV in the 2005 decision, implemented an incentive approach to encouraging the DBs to achieve efficient levels of opex. These programs resulted in consumers paying a premium for the DBs to provide opex over the last decade, so that the DBs would achieve efficient levels of opex.

The AER has demonstrated that the DBs have been more efficient with their opex than the earlier regulators allowed in developing its figure 7.1 in the draft decision.

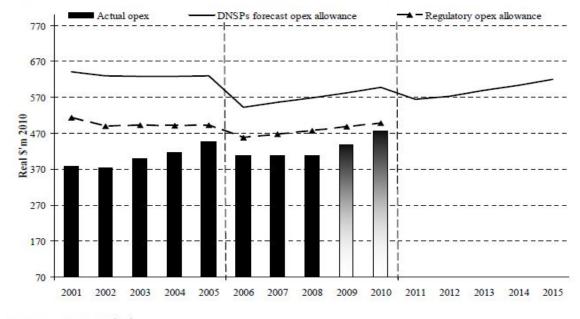


Figure 7.1 Victorian DNSP current regulatory control period outcomes (\$'m 2010)

This figure shows that over the past decade, the DBs own assessment of opex was greatly inflated above their actual needs, and as the regulators included higher levels of opex than they actually used, the DBs achieved significant savings below the regulatory benchmark which they were allowed to keep (a bonus), and for an incentive payment to be made in subsequent regulatory periods.

Source: AER analysis

The AER has introduced its Efficiency Benefit Sharing Scheme (EBSS) in other reviews which to a large degree replicates the schemes used by the ORG and ESCV. If the efficiency incentive schemes are to achieve their stated purpose, then there must be at least two core outcomes:

- 1. The difference between the amount of opex used and the amount assessed by the regulator as efficient and prudent should reduce over time
- 2. The difference between the opex used in one regulatory period and that allowed in the next should show a continuing trend. Any difference between the two must be the result of a clear and defined cause (a step change). Any other outcome does not reflect the purpose of the incentive scheme used.

Because the earlier regulators implemented complementary efficiency improvement schemes, the AER has correctly used the outcomes of these schemes as the basis for its assessment as to what an efficient and prudent level of opex should be for inclusion in the tariffs the Victorian DBs are allowed to charge for the service they provide.

The approach used by the AER in developing the opex allowances for the Victorian DBs reflects these basic aspects of incentive regulation. If the AER had not done so, then the cost premiums the consumers had paid as a result of the incentives, would be wasted.

#### 3.1 Base year opex

Whilst the EUCV does accept that basic approach used by the AER to set the forward opex allowances, it raised in its response to the DB applications, concerns that selecting a single pre-identified year as the starting point for developing the efficient and prudent opex is the second last year of the current period, being that one where the last known actual opex is revealed.

The AER has expressed its view that because of the incentive scheme there is no incentive on a DB to artificially inflate the opex in the defined year. The EUCV is not as sanguine about this presumption as the AER appears to be. Notwithstanding this reservation, the EUCV has observed there is considerable variation of actual opex for all years, and there appears to be a trend in the actual opex incurred and this is replicated over two regulatory periods. This can be seen in Figure 7.4 of the AER draft decision (page 272):

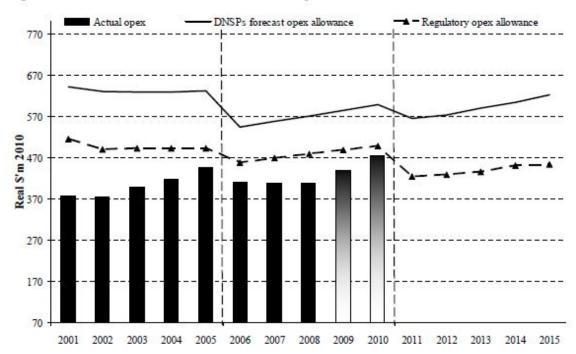


Figure 7.4 Victorian DNSP draft decision opex allowance

This figure shows that consistently opex increases towards the next regulatory period (showing a higher opex for year 4 than is incurred for the earlier three years. This could be attributed to the continuously increasing demand and consumption that all the DBs have evinced. But what is concerning is that between the fifth year of the early regulatory period and the early years of the following period, there is a distinct fall in opex, even though demand and consumption continues to increase. In fact, the aggregate opex for years 1, 2 and 3 of the current period is essentially static and only increases in the latter years, one of which has been consistently used by regulators as the "base year".

Because of this apparent anomaly, the EUCV suggests the AER should examine in more depth the reasons for any reduction of opex that occurs between regulatory periods at the next review, and to establish whether the apparent trend of opex increasing in year 4 but falling after the regulatory review is replicated.

Notwithstanding the concern noted above, the EUCV considers the AER has carried out a rigorous and detailed assessment

#### 3.2 United Energy approach

The AER notes that United Energy sought to implement a new approach which United considers will reduce opex over time, but will require an immediate increase ion opex as a result of the change over in approach. The AER addressed the United approach in considerable detail and concluded

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that the opex allowance should not be increased as a result of the new approach. The EUCV agrees that the AER argument for not allowing the United Energy approach to be incorporated in the opex element of the allowed tariffs for the new regulatory period is strong and cogent, and reflects current efficiency and prudency.

What the AER did not address is that United is permitted to expend its opex in any way it sees fit, only that the efficient and prudent opex will be allowed into the tariffs. If United considers that its new approach will result in savings then it can make the decision to implement the new approach and under the EBSS, will be able to retain the benefit of the savings it generates in this and the next regulatory period.

The EUCV supports the principle that a DB has the freedom to initiate approaches to improve long term efficiency and because of this the EUCV accepts that a DB (United in this case) should be rewarded if its initiative results on a more efficient outcome. The EUCV considers that what the AER has implied in its draft decision, is that United can develop its opex approach in any way it wants to but the AER will not allow United to increase tariffs as a result of the new approach.

#### 3.3 Self benchmarking for opex

The AER has essentially followed the principle of self-benchmarking as the basis for setting the new opex allowance for inclusion in the allowed tariffs. This can be clearly seen in the trends implicit in the following figures included in the AER draft decision

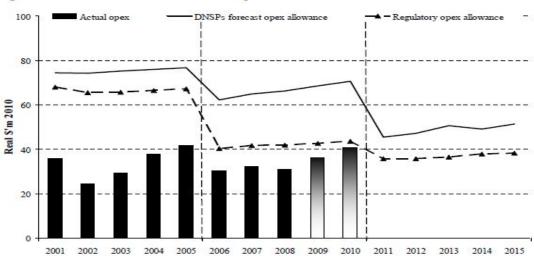
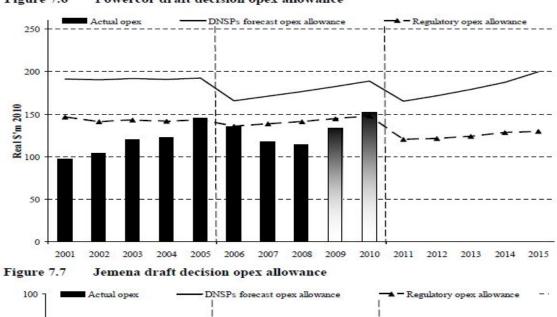
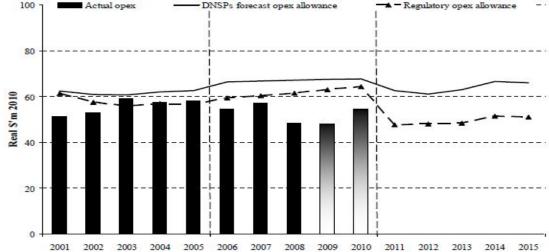


Figure 7.5 CitiPower draft decision opex allowance





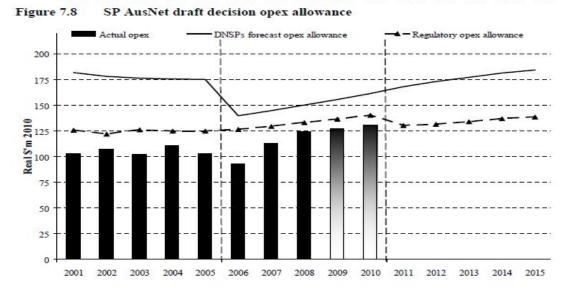
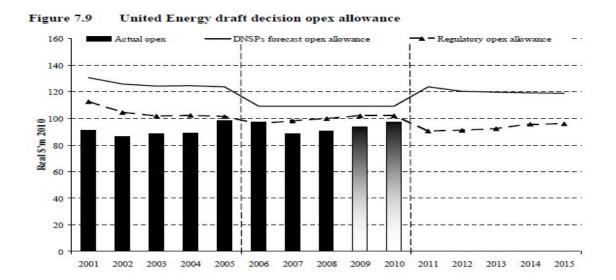


Figure 7.6 Powercor draft decision opex allowance

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What all these figures show is that based on the level of efficiency developed in the first regulatory period, this set the opex for the next period. What is also important is that the claims by the DBs significantly exceeded the actual opex and indeed each DB consistently used less opex that had been allowed by the regulator except for Powercor in 2010 and Jemena in 2003, and these overruns were more than compensated for in under-runs in other years.

Especially telling is that for both the regulatory decisions of 2001-2005 and the 2006-2010 periods, the regulator used a similar approach to that used by the AER in this review. That the process used by the AER has been previously demonstrated to provide a higher level of opex in the tariffs than was actually used, is a clear indication that the AER approach is sound.

In contrast the DBs all have claimed the AER is in error in the setting of the opex, and made extensive and in some cases intriguing arguments to support their contention they are entitled to a greater opex allowance. For example, in the revised proposals Citipower, Powercor and United all observe that the AER is in error because of a lack of consistency with recent AER decisions in other jurisdictions (NSW, Queensland and SA). What they do not comment on is that the AER draft decision approach is entirely consistent with the processes used by the ORG and ESCV in regulatory decisions applying specifically to Citipower and Powercor.

It is pertinent to note that after the ESCV draft decision for the 2006-2010, the DBs all made similar comments and assertions that the opex allowance was too low, but despite the ESCV moving only marginally to grant more opex, the DBs all under-run the ESCV allowance as can be seen in the above figures.

The EUCV considers that the AER has maintained consistency with the approach to setting opex that reflects past regulatory decisions and the outcomes of the incentive schemes that have applied for the past 10 years.

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## 3.4 External Benchmarking

Whilst the AER has predominantly assessed the allowed opex based on the historic performance of the DBs (ie self benchmarking) there is a fundamental concern that should a DB elect (such as United proposes) to change its approach to opex and the outcome is that higher costs result, the AER approach will result in the DB being able to argue in the next regulatory review for its opex to be set using a higher than efficient base year opex. One of the problems with self benchmarking is that once the costs have increased for whatever reason, the higher cost is carried forward into the next regulatory period.

External benchmarking is a tool that indicates whether the starting point is near efficient or not. Because of this the EUCV sees that use of external benchmarks has a role in setting efficient opex. That the AER has not used this tool in this review is understandable, but with the potential emergence of total factor productivity (TFP) being used at regulatory reviews, the development of such external benchmarking through TFP, the EUCV considers that the AER should implement some back checking of regulatory opex through use of TFP or some similar external benchmarking

#### 3.5 Substantiated increases in opex above benchmark

The AER has commented that there should be allowed growth in the base year opex to allow for

- Scale escalation
- Real cost escalation
- Step changes

#### 3.5.1 Scale escalation

The AER has addressed the aspect of opex having to increase as a result of the network increasing in size. That this would occur is not contested by the EUCV but the EUCV considers that great care must be taken to ensure that any scaling factor replicates the actual organic growth of the network occasioned by geographical expansion and that the impact of new replacement assets is reflected by a reduction of opex.

In its response to the DB applications the EUCV pointed out that many of the growth indicators used by the DBs would not apply in practice or to the extent claimed by the DBs.

The AER has developed a composite gross scaling factor reflecting changes in line length and number of substation transformers, combined with increases in connections. The AER then adjusts the gross scale factor to reflect economies of scale and a capex/opex trade-off to provide a net scaling factor.

In its response to the DB applications, the EUCV noted that the application of a price cap implicitly provides the DBs with greater revenue than that assessed as reasonable by the regulator should the forecast increase in demand and/or consumption be exceeded. As a result there is an implicit allowance included in the regulatory decision to provide revenue to the DBs as a result of scale escalation. However, the EUCV still considers that the AER approach might lead to a higher scaling factor than is appropriate, even though the EUCV agrees that the elements the AER uses to develop its scaling factor have a sound basis.

The EUCV considers that overall the outcomes of the AER approach are not excessively biased and the EUCV supports the current AER approach.

#### 3.5.2 Real cost escalation

The EUCV considers that the AER approach to adjusting forecast opex and capex for "real cost escalators" is basically flawed and the reasons for this are included in section 2.5 above.

As noted in the above section, the AER should do one of two things instead of implementing the flawed approach to adjusting future needs for addressing inflation:

- The AER should accept that inflation applying to the electricity networks will, over the long term, be reflected by the CPI. This approach was used successfully by utilities regulators from the first energy regulation in 1996 up to the time when the AER used it for the Powerlink electricity decision in 2007. Other than an apparent attempt to make escalation "more accurate" there is little reason to transition away from this approach which operated well for a decade.
- If the AER is convinced that the energy utilities exhibit a long term difference in inflation of labour costs from the CPI, then the AER could readily implement the use of actual movements in the core cost elements seen by energy network service providers to adjust for actual cost movements.

#### 3.5.3 Step changes

The ESCV addressed the issue of step changes well in its 2005 review and the AER appears to have taken a similar approach in this review.

The EUCV considers that a regulator can only allow a step change that really has occurred as a result of a government or regulatory direction. Changes that have occurred as a result of external aspects and are not specifically related to the electricity industry should not be included as a step change as these would be effectively included in the calculation of the WACC.

The EUCV considers that the AER assessment of step changes that should be included in the DB opex, is appropriate.

## 3.6 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.

Because of its concerns, in its response to the DB applications the EUCV considered the AER had to rigorously investigate the claims made by the DBs in relation to the related party contracts and to ensure the DBs were not using these relationships to increase costs to consumers and that they provided both an efficient and competitive outcome.

The basic concern that is apparent from the AER draft decision in relation to related party transactions, is that the outcome of using related parties to carry out some work cannot be demonstrably shown that such arrangements will result in the most efficient outcome. Both the NEL and the NER require that the outcome of regulation must lead to the most economically efficient outcome. By their very nature related party transactions cannot be demonstrated to be the most efficient.

Many of the large consumers of electricity all have identified that there are certain tasks where outsourcing can be more efficient and lower overall cost than carrying out the tasks themselves, so the principle of outsourcing is not opposed by the EUCV.

What industry experience shows is that the most efficient outcome from outsourcing is derived where the outsourcing will deliver a benefit compared to previous practice. This means that outsourcing must be demonstrably more efficient than current practice. In this regard the AER has identified that current outsourcing might not be providing the benefits expected, especially where the outsourcing has been carried out by a related party.

In its draft decision the AER notes the Tribunal decision as to whether a margin should be added to the cost of outsourcing to include a profit margin. The EUCV agrees with this. What the EUCV does note, is that inclusion of the profit margin does not then make the outsourcing cost efficient. The AER addresses this issue in depth.

Outsourcing is only more efficient when the costs of outsourcing plus the margin is less than the cost of carrying out the work internally. The most efficient outsourcing outcome is where the outsourcing is competitively tendered.

What the DBs have consistently failed to provide is clear evidence that the outsourced costs are less than carrying out the work internally. As the AER notes there are significant elements of the costs (especially in relation to capital cost items) which are provided to the contractor which are owned by the business or are transferred to the contractor. This means that in order to ensure that the decision to outsource on the basis of achieving a more efficient outcome, the total costs to the business if the works are carried out internally must be compared to the total costs if the work is to be outsourced. Unless such a comparison is made, it cannot be demonstrated that outsourcing is more efficient. Such a comparison is made more difficult in the case of outsourcing to a related party.

One of the most contentious elements of outsourcing to a related party, is that by its very nature the work has not been competitively tendered for, and therefore the risk is that the price offered by the related party is not efficient. In particular a related party arrangement which identifies that direct costs are included in the work but the overhead and profit markup needs to be added (the margin) is an unusual approach. Most outsourcing (including that for capital works) when priced in a competitive way, has all of the costs included in the offer, and the profit to the contractor is not divulged.

In the case where the contractor expects its direct costs to be recovered and to this is added a margin, this is not necessarily demonstrably an economically efficient outcome as the risks of the costs still lie with the business and not the contractor. The AER makes this point in the assessment of the new United Energy approach where although the rates for each task have been competitively priced, the quantity of the activities still leaves the risk with United. If the risks of the quantities still lie with the business, there is no certainty that the outcome is more efficient than carrying out the work with an in-house labour team.

In some cases the AER has not been able to differentiate the actual historic costs in relation to assessing the efficient level of opex needed for each DB, as the current costs already are carried out by a related party, and there is no certainty that the related party has provided the most efficient level of opex.

To overcome this problem, some of the DBs provided reports from consultants the businesses have employed to provide substantiation that the current related party costs are efficient. The EUCV considers that, in cases such as this, great care needs to be taken in assessing the independence of such reports. The EUCV comments that there is a world of difference between a consultant's report giving a view as to an "arms length" view of the costs of an activity, to a contractually binding firm offer to carry out an agreed scope of work made in competition with other qualified contractors.

Overall, the EUCV considers the AER has made a detailed and in-depth assessment of the issue of related party transactions and the impact of these on assessing efficient costs for opex (and capex). Whilst the EUCV is not convinced that consumers are effectively paying a premium so that the DBs and their owners can garner increased profits, there is significant difficulty in proving either way whether this concern is substantial.

On balance, the EUCV sees that the AER approach is likely to achieve a minimum of cost premium for consumers and therefore considers the outcome of the AER approach is a sound attempt to resolve this aspect.

## 3.7 Summary of the EUCV view on Victorian DBs opex

Victorian DBs 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 approach used by the AER to assess what is an efficient level of opex continues the approaches used by the ORG and ESCV in previous decisions for the five electricity DBs.

Whilst the EUCV has concerns about some issues, it considers that the AER has developed credible levels of opex required by the DBs to maintain the current levels of service. The approach used by the AER recognizes that it is required to allow only efficient levels of opex to be included in the costs consumers have to pay for the electricity network services and the AER assessments and deliberations clearly have show that these are more likely to produce outcomes that reflect the requirements of the NER, than the amounts claimed by the DBs.

It must be remembered that if the DBs are sufficiently concerned that they consider the levels of opex are insufficient, they have the option of absorbing these increases in this regulatory period and gaining higher allowances in the future. If the DBs actually do incur higher opex than that assessed by the AER, such an over-run will offset the previous significant gains the DBs have accrued in the past 15 years.

## 4. <u>Service Performance Targets</u>

The AER has provided a detailed and comprehensive review of the applications for the DBs in relation to providing an incentive to the DBs to improve the quality of the service they provide, and the reasons why the AER considers a STPIS is appropriate.

Countering this is a view that further service improvement is unlikely. For example, United Energy comments on page 283 of its revised proposal:

"UED believes that there is currently limited scope to improve reliability across its network."

The EUCV considers that a STPIS is an essential element in the regulatory bargain between consumers and NSPs even if there is limited scope for further improvement. As a minimum, consumers should receive service performance in line with what they pay for. If the potential for further service performance improvement is limited, the potential for reductions in service remains omnipresent and the STPIS provides bulwark against NSPs from allowing a reduction in service performance.

Over time the service performance incentives on the DBs has provided Victorian consumers with an improvement in service and the EUCV supports a continuation and even expansion of the service incentive program. In particular, the EUCV sees that improvement of poorly performing feeders is an aspect that must be targeted by the AER in future regulatory reviews. That the AER has determined that its attention in this review is to only focus on average performance is of concern.

## 4.1 Principles in relation to the STPIS

In its response to the applications, the EUCV made 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

Despite the AER considering that the STPIS it established should be standard across all DBs, it has agreed to vary a number of key elements. In particular, it has agreed to vary the way in which extreme events are included or excluded, and the degree to which each DB is exposed to capping its financial reward or risk.

The EUCV does not accept that the loss of consistency across all DBs is warranted, and recommends the AER imposes the same approach across all the DBs and not to allow differences. The EUCV concern is that a DB will seek a change only if it considers that the change will be a benefit and increase the potential for gaining financial reward or preventing the full impact of its poor performance from being converted to a penalty.

#### 4.1.2 Risk minimisation

The EUCV noted that that SP Ausnet had sought unlimited revenue to be put at risk to service performance. In principle, this approach reflects what occurs in competitive enterprise and normally the EUCV would support such a move.

However, the EUCV also recognises that such an approach is in reality asymmetric. If SP Ausnet performance was so bad that large elements of its revenue would be removed in a later regulatory decision, it is unlikely that such a scenario would be permitted by the AER as it would potentially lead to the loss of supply to SP Ausnet customers. So in practice, catastrophic failure in performance has an implicit floor as failure of the system is unacceptable.

In contrast, unlimited upside would be a commercial benefit to SP Ausnet and implies that SP Ausnet sees that the STPIS and the targets set will result in a reward exceeding the standard +/- 5%. The draft decision allows SP Ausnet to have notionally +/- 7% of its revenue at risk.

The EUCV considers that this will impose a higher financial risk to consumers than is warranted. This aspect of consumer risk has not been considered by the AER in its draft decision.

#### 4.1.3 Setting targets

In its response to the DB applications, the EUCV observed that the performance of the DBs was being influenced by the inclusion of the estimated 2009 performance figures. The EUCV sees that the AER has used actual performance outcomes in its analysis.

However, what the AER has not done is to assess whether the targets it has set for the next period would have resulted in a net zero outcome if the targets had been applied to the actual over the previous 5 years.

Whilst this might be implied because the AER implies that it will use the arithmetic average of the actual performance outcomes, there is uncertainty about this. For example, for rural long SAIDI, SP Ausnet in its application (table 4.1) estimates the 2009 performance and then averages all five readings to reach an average to create a proposed target. In contrast, the AER has different inputs in its table 15.4, and the proposed target is not the arithmetic average (AER posits 320.46 and the arithmetic average of the five readings is 305.73) so there is no consistency apparent in the approach. In table 15.17, the AER then sets SP Ausnet long rural SAIDI service target at 267.10 but there is no clear explanation as to how this new figure is derived.

The EUCV agrees that the new target should be less than that achieved in the past as the intent of an incentive program is to achieve better outcomes for consumers, but some of the targets set by the AER provide a worse outcome for consumers in terms of service performance especially those set for Jemena and United.

#### 4.1.4 Service improvement over time is the aim

The AER makes the comment that it has set the opex and capex to maintain the current level of service (see page 675)

"The AER concludes that, while many aspects of the Victorian DNSPs' capex and opex influence the level of network reliability in the long term, the capex and opex allowances provided for in this draft decision do not include expenditure that is designed to enhance network reliability. The conclusion not to amend the STPIS targets in response to these projects is consistent with the AER's assessment of, and decision on the DNPS' proposed opex and capex proposals pursuant to clauses 6.5.6 and 6.5.7 of the NER respectively."

The EUCV accepts that this is the basis for the overall basis of the AER draft decision. What is not clear is that the capex set by the ESCV for the current period did not have this as its aim, and there was an expectation that service performance would improve as a result of the capex provided in the current period.

That the AER has not required the DBs to have service targets which reflect the current period allowances is of concern.

## 4.2 An observation regarding jurisdictional involvement

The EUCV notes the Victorian Minister for Energy in his response to the DB applications, has adjured the AER to recognize that

"In making this determination the AER must develop appropriate service standards and incentives that ensure the service the Victorian consumers receive from their distributors is commensurate with the charges they pay. "

The EUCV concurs with this statement and notes that the government has not made any attempt to require the AER to impose standards. This places extreme responsibility on the AER to ensure that the regulatory bargain (cost vs service) is reasonable.

#### 4.3 Summary

Whilst the AER has carried out a detailed examination of the proposed service targets and performance incentives, it is extremely difficult to assess how the AER actually arrived at some of the performance targets.

The EUCV considers that in general, service performance should improve over time with the investment of capital. Therefore the targets for an incentive scheme need to reflect that considerable funds have been invested in the past and continue to be so. Consumers have paid for consistent increases in both capex and opex over time, and despite there being funding allowances for improving service performance we have seen little improvement in the current period and the AER has set targets that do not increase performance for the next period.

This is disappointing.

## 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 released in mid 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 the Victorian DBs 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 EUCV supports this decision as only 15 months has elapsed since the rigorous assessment was made by the AER in setting these parameters.

In their revised proposals, the Victorian DBs have identified two parameters where they consider the draft decision did not deliver outcomes appropriate for their aspirations – the debt risk premium and gamma, although all of them considered that the market risk premium should be higher than the 6.5 all finally agreed to.

The Victorian DBs reiterate submissions provided to the AER by other DBs and provide more academic analysis indicating that DRP should be set at 4.28% (up from the AER draft decision value of 3.25%) and a value for gamma ranging from 0,2 to 0.5 (down from the AER draft decision value of 0.65).

What is noticeable is that the DBs all did not contest the value for equity beta or the gearing used – essentially the DBs focused on aspects where the inputs might be changed so as to increase the value of the return they get on assets.

The EUCV considers that all the inputs to the WACC are assessments and to vary one in isolation can create outcomes that do not reflect the actuality of the final figure used. In the development of the WACC inputs in the 2008/09 review, this feature was recognized and the outcome was a comprehensive and balanced suite of WACC inputs. To maintain the credibility of the AER, it should recognize that no inputs should be varied from the Statement of Regulatory Intent (SoRI), as to do so immediately implies there was a poor assessment at the time of the WACC review and there is concern that regulatory consistency can be sacrificed over short term variations in the inputs.

#### 5.1.1 Market Risk Premium

All the DBs pointed out that the MRP is quite volatile and currently a higher MRP is warranted based on short term assessments. The EUCV concedes that the MRP is volatile and that at times it exceeds the long term average. Because of this there are many times where the MRP is lower than the long term average but none of the regulated networks (gas and electricity) have ever suggested that a lower MRP should be used because the current market conditions show that this is the case – they just do not argue and accept the benefit that comes with the higher MRP being used.

In their revised proposals all DBs accepted, albeit reluctantly, the use of the MRP value stated in the SoRI which is 50 basis points higher than that used by regulators since energy regulation commenced in 1996. The decision by the AER to increase the MRP to 6.5% was a direct result of the concern held that such a step increase reflected the needs to the regulated businesses in the latter stages of the global financial crisis. That the GFC has had such a marginal impact on the Australian economy (compared to that seen in other economies) reinforces the view that the new level of MRP is higher than necessary and adds to the overall conservatism included in regulatory decisions.

The EUCV agrees with the AER draft decision that there is no need to increase MRP above the level included in the SoRI and, if anything, should be reduced to the long term level used previously.

## 5.1.2 Gearing

In keeping with their approach that they only sought to increase inputs that would lead to a higher return on assets, all of the DBs agreed that the gearing of 60% was appropriate to each of them. In fact the DBs have actual gearing higher than 60%<sup>2</sup>, with SP Ausnet geared in the low 60% range Duet (owner of United) is geared at over 80% and Spark (owner of Citipower and Powercor) is geared at about 75%.

The fact that all are geared higher than the benchmark gives their equity providers a better return on their equity than implied by the CAPM calculations.

## 5.1.3 Equity beta

In its response to the DB applications, the EUCV pointed out that the AER SoRI value for equity beta is quite conservative, and the AER comments in its final; decision on the WACC review that this is so.

<sup>&</sup>lt;sup>2</sup> This data on gearing is sourced from CommSec data

The AER has the responsibility to ensure that, if there is to be a bias in outcomes, then the bias should be towards conservatism in favour of the regulated business. The reason for this is pragmatic – that a small unnecessary increase in price to consumers will be less detrimental to consumers to a small reduction in price that might result in failure of the network, creating significant loss in supply.

The EUCV accepts this premise in principle, but stresses that such an approach should not be the basis of large unnecessary transfers of wealth. In particular the EUCV considers that any conservatism should be aggregated into one identifiable element, and not included at every stage of the regulatory assessment. Compounding conservatism will only lead to unnecessary transfers of wealth.

The EUCV remains convinced that the current setting of equity beta is, based on the AER's assessment and calculations detailed in the Final Decision of the WACC review, still too conservative and should be reduced.

## 5.1.4 Gamma

All the Victorian DBs provide additional information supporting why the value for gamma should be reduced from the SoRI value of 0.65 and returned to previously used level of 0.5 (or lower).

Within the development of this point estimate of gamma, AER assessed a number of different approaches to the valuing the elements of gamma. The final landing the AER reached is an amalgam of the differing views and although the final calculation is derived from two elements (100% payout and a utilization rate of 0.65).

However in reaching this the AER recognized that the payout ratio could range from as low as 71% and a high of 100%. They also determined that the utilization rate could range from a low of 0.57 to a high of 0.74 depending on the method used to assess the rate. On balance they considered that the best assessment was 0.65, which shows a bias towards a higher value of the payout ratio. In fact the 0.65 could just as easily be 88% payout and a utilization of 0.74 as implied by tax statistics.

The amounts of contradictory data and assessments makes setting a point value a judgment based on the degree of certainty of each of the workings by the many consultants and academics, and the accuracy of each interpretation of the datasets.

The EUCV does not have new data which might provide further clouding of the issue, but looks more at the overarching issues associated with attempting to examine such an issue, which itself is part of a suite of inputs, all of which have a degree of conservatism built into them.

What has been consistently overlooked is that the WACC is developed to address the "notional" network service provider. Much of the debate provided by the DBs relates to the fact that the makeup of taxpaying businesses includes in many instances firms which are wholly or partly owned overseas and therefore might not be able to benefit from being able to access the benefits of tax imputation.

Based on the regulatory asset bases, the electricity networks in the NEM are  $\sim$ 80% owned by government,  $\sim$ 10% owned by listed Australian firms and  $\sim$ 10% owned overseas.

The assets owned overseas were purchased after the introduction of tax imputation, and most were acquired before regulation had been applied indicating that imputation would be included in regulatory decisions. The clear import of this is that the overseas businesses acquired the electricity network assets in the full knowledge that imputation would not be a benefit to them, but despite this made the decision to acquire the assets regardless of imputation.

The remaining assets are owned by Australian listed entities (APA, Spark and SP Ausnet). It is possible that some of the shareholders of these entities do not receive the benefits of imputation, but the majority of shareholders probably do.

Thus, in practical terms, actual ownership of the electricity network assets provides a clear indication that the debate on imputation is probably inappropriate if it concentrates on deriving the benefits of imputation based on the ownership of all assets of firms operating in Australia. In contrast the "notional" electricity network is primarily one which is publicly owned through governments.

As government owners notionally get the full benefit of imputation and overseas owners bought the assets in full knowledge they would not get a benefit from imputation, the reality is that gamma should be greater than 0.9 but less than 1.0, and the debate should revolve around where between these two extremes the correct answer might lie.

Using the AER value for gamma of 0.65 (which implies that 2/3<sup>rds</sup> of shareholders get the benefit of imputation) is in stark contrast to reality and history.

On this assessment, the AER value of 0.65 for gamma is quite conservative.

#### 5.1.5 Overall assessment

The EUCV considers that if the AER concedes that should the DBs benefit from changing the WACC inputs, then other inputs (such as those queried by EUCV) should be likewise adjusted to reflect actuality. However the EUCV considers that the AER approach to developing the inputs to the SoRI were sufficiently robust so as to not warrant changes from any until the next WACC review is undertaken, and that the AER has built into the WACC parameters, probably a greater degree of conservatism than is warranted.

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

Regulatory consistency is considered to be a significant element of the regulatory process. The development of the SoRI provides a clear indication as to what the AER considers is a balanced and equitable framework for establishing regulatory outcomes. To vary from the SoRI is a major step away from providing this certainty and changes should therefore be seriously considered and assessed in the overall context of what the impact of the change will be for all parties involved.

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

The Victorian DB claims have their revenues increasing at a very high rate. AER draft decision reduces this somewhat

AER points out that despite previous over-recovery of revenue service performance has remained constant ie that despite spending less than benchmark, service did not suffer. The clear import of this view is that the incentive programs implemented by the ESCV in the past must be seen as providing a clear pathway towards achieving the desired outcome of incentivizing the DBs to achieve the most efficient outcome.

In its Final Decision in 2005 the ESCV stated: (page 69)

"Financial incentives on service are also designed to achieve an appropriate balance with incentives to minimise expenditure. The experience to date suggests that, in most cases, the distributors have been able to improve service performance while also undertaking less expenditure than was forecast at the last price review.

The Commission is keen to ensure that these benefits are sustained into the future. The Commission's decision on the service incentive arrangements aims

to ensure that the services valued by customers are identified, measured and provided where the value of these services is more than or at least equal to the cost of providing them.

Therefore, the Commission has reviewed the measures that are linked to the service incentive arrangements and the value of the incentives provided to distributors under the arrangements to ensure that they align with the value that customers place upon those services."

This clearly states what the intention of the ESCV was in providing incentives to the DBs to achieve efficient performance.

Consumers have indicated a preparedness to pay for continuing improvement in service performance (subject to a cost benefit review) but the DBs elected to give effectively static performance and maximise the benefit of the incentive. As a result of their performance, there is no doubt that the DBs have shown there was greater efficiency to be achieved over the course of the current regulatory period and it is still not certain that maximum efficiency has yet been achieved.

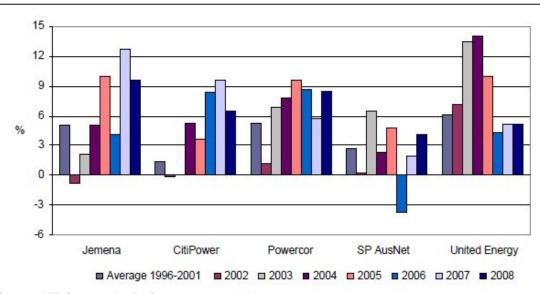
The AER has rightly accepted that the DBs were incentivised to achieve greater efficiency and used the out turn of the DB performances as the basis of the next regulatory period. This is exactly what the ORG in 2000 and the ESCV in 2005 expressed a desire to see occur and provided the basis for the AER to continue with this approach.

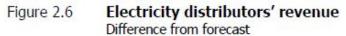
If the AER resiles from the approach already implemented, the costs incurred by consumers as a result of its implementation will be lost, and a "free" benefit granted to the DBs.

In 2004/05, the ESCV used an approach similar to the AER draft decision in setting opex and capex, and the result was clear – overall the DBs used less opex and capex than the ESCV had allowed to be paid for by consumers, and the performance of the DBs did not suffer.

In addition to the under-run on opex and capex, the DBs acquired more revenue than the ESCV had anticipated. This was a result of the greater than allowed increases in consumption and demand which allowed the DBs (under the price cap approach) to retain the benefits of increased usage by consumers.

Overall the DBs were able to significantly increase their revenues from those considered appropriate by the ESCV and the following figure from the AER Victorian Electricity Distribution Businesses Comparative Performance Report 2008 dated November 2009 shows this clearly.





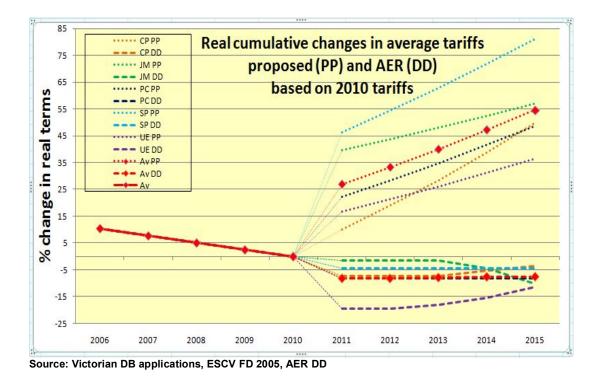
Source: AER Comparative Performance report 2008

This actual performance of the DBs shows that the AER approach used in the draft decision (continuing the approach established by ORG and continued by ESCV) is sound, consistent and provides regulatory certainty.

What is just as telling is that the out turn of the AER draft decision, continues the trends in tariffs. In the current regulatory period, tariffs fell in real terms, yet despite this the DBs increased their revenue above that set by the ESCV.

If the AER had accepted the DB proposals, tariffs would have increased dramatically as is shown in the following figure. As a result of the AER draft decision, tariffs follow a similar trend to those set by the ESCV, showing there is consistency of the AER approach with the approach used by the ESCV and where despite what was alleged by the DBS to be an aggressive regulatory decision by ESCV, they were able to increase their profitability.

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Overall, the AER draft decision has delivered a balanced outcome, maintaining consistency with previous regulatory decisions, which were based on incentives to encourage the DBs to reach the most efficient operating arrangements.

One consistent observation that arises from the DBs revised proposals, is that, in its draft decision, the AER appears to have not followed the approaches it used in previous regulatory decisions for electricity DBs in other NEM regions. In the other regions, the AER has permitted large increases in capex and opex, and even allowed for negative growth in consumption. What the Victorian DBs do not appreciate is that they have had the benefit of incentive regulation for a decade in order to develop the most efficient operations, whereas the DBs in other regions have not had the same level of discipline or incentive that the Victorian DBs have enjoyed.

Electricity consumers in Victoria have paid significantly for these incentives to reach high levels of efficiency, and the result for the consumers is to see a continuation of the benefits of this regulatory approach,

The AER draft decision results in a good outcome for Victorian electricity consumers whilst providing a revenue stream the Victorian DBs have shown is adequate to provide the services agreed upon.

## 5.3 Pass through events

In its draft decision the AER proscribed the extent of the ability of the DBs to seek "pass throughs" of unexpected and un-allowed for costs.

In particular, the DBs remarked that the AER approach would not permit an appropriate recovery of the transmission costs they incur on behalf of their customers. The EUCV notes that transmission costs do vary significantly year on year, most commonly as a result of the allocation of the inter-regional surplus residue. The EUCV accepts the principle that actual transmission costs they incur on behalf of their customers should be recovered in full by them from their customers.

In regard to the other pass through of costs sought by the DBs, the EUCV agrees with the AER draft decision that some costs should not be passed through and others need to be of a magnitude that warrants consideration to be passed through.

In this regard, the EUCV points out that the DBs are being awarded a return that is equivalent to the average of all businesses operating in Australia, but with significantly lower risk. For example, all capex incurred by a DB is automatically rolled into the regulatory asset base and therefore recovers both a return of, and a return on, the capital invested, and no investment is ever assessed for its prudency or utilization at a later stage. In contrast, nonregulated businesses have these risks and in addition must bear the costs of all changes in their markets.

It is inequitable that a regulated business should be able to reduce its risks yet retain a similar reward in terms of returns on assets as firms operating in the open market.

The EUCV considers the AER approach should include the imposition of a minimum level of materiality for a DB to be able to seek a pass through and that those "pass throughs" granted under the AER discretion should be limited.

The EUCV reluctantly accepts the AER draft decision in regard to the "general" pass throughs allowed but opposes the inclusion of the "insurance event pass through" as it is currently written. The drafting of the AER proposed pass through could allow the DB to insure for a much lower amount than needed, and by doing so would reduce its opex with the opex saving being retained by the DB. Should there be a claim which results in higher costs to the DB in a future regulatory determination, then the pass through as currently drafted would allow the DB to pass onto consumers the over-run in costs.

## 6. Demand and consumption forecasts

#### 6.1 A general view of forecasting

The AER advises that it considers the more disaggregation done in the development of the forecasts the more likely the right answer will eventuate. Countering this view is that more disaggregation there is the more likely assumptions made are to be incorrect. The benefit of a high level review is that the answer developed from a bottom up assessment (the disaggregated review) it shows whether the bottom up conclusion has validity. If the two approaches show a marked difference then it is more likely that the long term trends are less susceptible to error unless there can be a clear and unequivocal reason to doubt the longer term high level trend.

The AER seems to agree with this view because it highlights a concern that there is little transparency in the development of the assumptions that have been used by NIEIR to develop its disaggregated outcome.

The fact that AEMO has developed a 2010 APR which shows significant increase in forecasts between 2009 and the recently released 2010 indicates that the pessimism shown by NIEIR and to a lesser extent the ACIL report might be significantly wrong.

The AER points to the potential impact of the CPRS and highlights that at the time of drafting the CPRS introduction is unknown. Since then the government has advised that the CPRS legislation is not to be introduced until 2013, and therefore the CPRS is unlikely to have any impact in the outlook period. Despite this there is a clear market outcome that the use of electricity is very inelastic especially in relation to price

Introduction of Advanced Metering Investment (AMI) is also unlikely to reduce the volume of electricity used as its focus (along with the proposed ToU approach to network charging) is to shift usage times rather than reduce volume of electricity used.

This reinforces the view that it is core assumptions made in the disaggregated approach that have a major impact on the outcomes, and that the long term trends should be seen as providing a very sound basis for assessing the validity of the outworkings of the bottom up approach.

The AER points to observations made in submissions about the impact of AMI and ToU policies. It must be remembered that large energy using businesses >160 MWh pa have been subject to interval metering and ToU retailing for many years and despite this electricity consumption has continued to increase. This provides first hand data supporting the view that AMI and ToU are unlikely to change usage practices. These same

businesses have been exposed to ever increasing electricity costs and the impact of prices shows there is little elasticity in demand due to price.

The fact that the DBs employed a consultant (NIEIR) to assist with developing their forecasts brings with it the connotation that perhaps the consultant might not be seen as fully independent. In contrast, the AER – the independent regulator – employed its own consultant (ACIL Tasman) to prepare an independent assessment of future trends in demand and consumption.

The AER in its draft decision used ACIL Tasman to assist in developing its forecasts, and this approach enhances the independence of the assessment. Concurrently with the AER development, AEMO released its 2010 Annual Planning Report for Victoria, and this tends to support the independent assessment of AER/ACIL in that demand is expected to be higher than initially forecast and consumption is also expected to rise, in distinct contrast to the DB view that consumption is likely to fall over the regulatory period.

The EUCV has a concern that there is a high degree of difference between the various assessments of demand and consumption, but the impact of the assessments has a marked impact on the costs consumers are to carry. To rationalize these disparate outcomes and forecasts, care needs to made to ensure the independence of the party developing the forecast has no vested interest in the outcome. In this regard the EUCV considers that ACIL and AEMO have this degree of independence although it must be noted that AEMO as the transmission network operator must be considered to be less independent than ACIL in this assessment.

## 6.2 Implications of under forecasting consumption

In their applications, using their own and NIEIR data, the DBs forecast an aggregate reduction in consumption and an increase in demand for electricity. This mirrors the claims made by ETSA in the SA EDPR review and where the AER accepted that consumption in SA is to fall over the regulatory period.

The benefits to the DBs for such are forecast are that these support the DB claims for increased capex as demand growth supports increased investment, but a lower forecast consumption allows the DBs to increase their tariffs and so increase their revenue above the amount that reflects efficient capex and opex.

The figure 5.2 developed by the AER in its draft decision highlights an interesting aspect of the issue of forecasting.

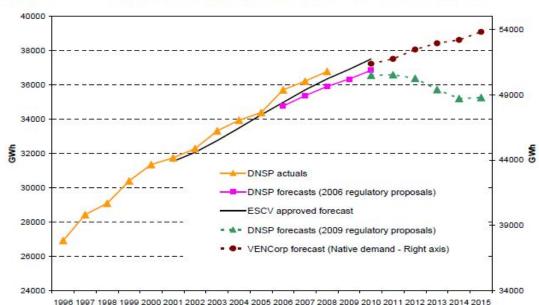


Figure 5.2 Actual and forecast energy consumption—DNSPs VENCorp and ESCV

This figure shows that the actual power consumption in the five DB areas was higher than the forecasts on which the ESCV allowed the DB tariffs to be developed even though this was higher again than the consumption forecasts of the DBs. Figure 18.1 in the AER draft decision shows that the DBs in aggregate achieved a greater revenue than the benchmark amount set by the ESCV. These two facts when taken together indicate that the DBs benefitted by under forecasting the expected consumption.

The AER has demonstrated that great care needs to be taken to ensure that the forecasts of consumption area established as accurately as possible, and that the DBs (and their consultants) have a vested interest in under forecasting consumption.

#### 6.3 AEMO forecasts

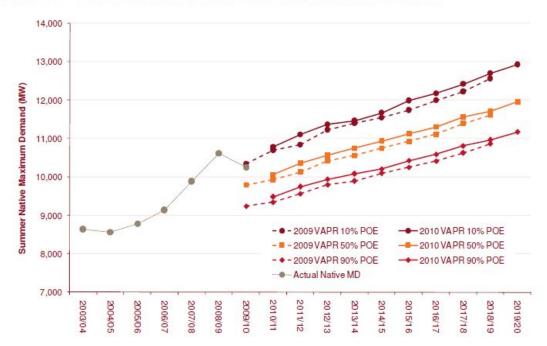
AEMO has a role in forecasting growth in peak demand and consumption for Victoria in its roles of NEM Operator and as the operator of the Victorian electricity transmission system. These two roles can have a degree of conflict, especially as AEMO as market operator needs to provide accurate input to the market information for investment by others in the market. This information is provided in the ESoO.

The EUCV is aware that one of its members (a large consumer of power with a relatively flat demand profile) has made a submission to the AER in respect of its expected demand and consumption over the new regulatory period and of its commissioning of an embedded generator. Although this will reduce demand by the business (but only have a small reduction in consumption), the DB is forecasting a large reduction in consumption and an

increase in demand. Whilst this is only one example of forecast consumption and demand changes, it is pertinent to note that the DB made no attempt to contact the business as to its future needs when developing its forecasts. The EUCV therefore raises the question as to the accuracy of DB forecast needs when it fails to discuss future power needs with one of its largest consumers of power.

The AEMO role as the Victorian transmission system operator requires it to ensure the "lights do not go out". In this regard AEMO produces the Annual Planning Report for Victoria and ensures that there is adequate transmission for the expected future demand for power in the state. This requirement would tend to lead to overstating expected future demand.

Notwithstanding the potential for conflict, in its 2010 APR (figure 4-2) the AEMO APR provides some interesting observations about historic and future peak demands.





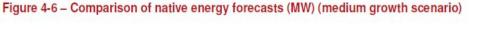
## Point 1

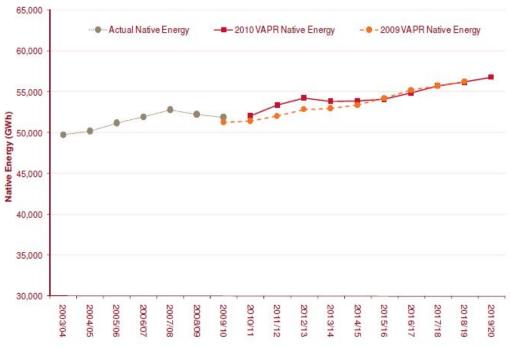
Demand peaked in 2008/09 after another sharp rise the year before, and then fell dramatically in 2009/10. This sharp rise in the two earlier years reflected a mix of burgeoning production before the global financial crisis combined with very hot summer weather. The trends for the next regulatory period show a significant reduction in peak demand compared to the 08/09 peak. The fact that the DBs all "survived" the high peak demand in 08/09 indicates that the capex allowed by the ESCV in the current regulatory period was adequate to accommodate such an unexpected peak in demand. This indicates that the AER approach to basing future capex needs on current capex trends is sound regulatory practice.

#### Point 2

The AEMO forecasts show a significant and identifiable difference between the forecast of 2009 (where the impact of the GFC was still being felt) with the clear expectation of increased demand for the same years when the 2010 forecast was developed.

That this is the case, provides clear evidence that the DB forecasts showing a reduction in consumption could be incorrect, based as they were on the expectation of an overhang from the GFC. This is depicted by AEMO in their forecast of expected consumption shown in their figure 4-6 as assessed in 2009 and 2010 APRs.





AEMO points out that their assessment of consumption between 2009 and 2010 APR shows an increase in consumption in the early years of the regulatory period, with the two forecasts tending the same in the last years.

There is a clear indication that AEMO considers that consumption of power will be even greater in the regulatory period than they forecast a year earlier when the DBs were providing their forecasts showing a reduction in demand.

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 overestimated the likely increase in demand and under estimated the increase in consumption.

## 6.4 The detailed assessments

In their revised proposals, the DBs universally disagree with the AER assessments of future demand and consumption, and point to the extensive work done by NIEIR on their behalf.

Equally the AER draft decision, backed by its ACIL reports, has been just as rigorous as the DB/NIEIR analysis but has the benefit of being truly independent.

ACIL<sup>3</sup> makes an interesting observation which the EUCV strongly supports as a result of its exposure to commercial business practices:

"...ACIL Tasman recommends that each forecast be adjusted so that the bottom up, spatial forecasts do not exceed the top down, system level forecasts taking into account coincidence factors. In some cases, this may require adjustments to one or the other of the forecasts to ensure consistent treatment of embedded generation and high voltage customer load."

In its assessment of forecast consumption the ACIL assessment tends to reflect the conclusions AEMO reaches about future electricity consumption – that consumption is not likely to fall in overall terms and is more likely to increase.

That the DBs do not agree with the AER draft decision in regard to forecast consumption is not unexpected. The DBs generally observe that NIEIR process and assumptions are similar to those used by ACIL and NIEIR has updated some of the inputs to reflect the passage of time. They then draw the conclusion NIEIR is now correct and ACIL is wrong.

Citipower<sup>4</sup>, for instance, comments that ACIL has made a fundamental error in that it has assumed residential consumption will remain constant

"Frontier found that ACIL Tasman's approach to estimating the impact was flawed primarily because ACIL Tasman assumes a constant per capita energy use. As was acknowledged by ACIL Tasman, this does not account for:

<sup>&</sup>lt;sup>3</sup> ACIL Tasman, Victorian Electricity Distribution Price Review, Review of maximum demand forecasts, Final report19 April 2010 page xiii

<sup>&</sup>lt;sup>4</sup> Citipower Revised proposal page 96

- changes in the key drivers of energy consumption, including economic growth and weather (ACIL Tasman only accounts for population as a key driver); or
- policy adjustments that affect energy consumption.

Frontier also observed that ACIL Tasman's approach is inconsistent with the principles of best practice that ACIL Tasman describes in chapter 2 of its report."

Citipower goes on to state that the AEMO report on consumption forecasts was out of date and should be considered with caution because of this. In fact the AEMO APR 2010 supports the forecasts made by ACIL and does not provide support to the NIEIR revisions.

The EUCV is of the view that the DB assertions that there will be reductions in consumption as a result of policy decisions (eg AMI, ToU tariffs and CPRS), is not so much about reducing consumption as they are about load shifting and changes in fuels used for generation.

AEMO in its forecast takes into account many of the same issues as the DBs do in support of their expectation of reducing consumption, but arrive at a conclusion that consumption will continue to increase.

So what is left is a view by the DBs and their consultant, that consumption will reduce and this is in their interests because if consumption does increase or remain static, the DBs will garner significantly increased revenue.

ACIL Tasman and AEMO (which do not benefit by underestimating future consumption) have a common view that consumption will increase during the regulatory period.

# 7. Pricing Methodology

## 7.1 General

In its response to the DB applications, the EUCV made reference to pricing policies of the DBs, with specific reference to the SP Ausnet proposal to introduce and implement a critical peak pricing approach or summer day peak pricing.

The EUCV notes that currently the Victorian government has introduced a moratorium on the introduction of time-of-use (ToU tariffs) and that such ToU tariffs cannot be effectively introduced until interval metering is available across all users.

However the principle of ToU tariffs still needs to be addressed in terms of the future for introducing pricing which will reflect usage of network assets. The concern that the EUCV has is that those causing the need to increase the capacity of networks for short periods of time, should pay for the use of the assets that are needed. The EUCV sees that this concept can only be introduced when tariffs are more based on demand than on consumption.

Already large consumers of electricity pay for network services based on demand with a small element for payment reflecting consumption. AEMO as the operator of the Victorian transmission network allocates a significant portion of its costs based on demand incurred on the 10 peak usage days in a year, although this approach is not used universally amongst all TNSPs.

The EUCV considers that the DBs should, once the capability is provided by the roll out of interval meters to all consumers, seek for tariffs to move away from consumption to reflecting a greater exposure to demand, especially on hot summer days as SP Ausnet proposes.

The AER needs to address this issue at some time and the EUCV suggests that as there is an expectation during the new regulatory period that ToU tariffs will be universally applicable in Victoria, it should, in the near future, convene discussions with DBs and consumers to address the structure of tariffs and how to make them cost reflective. To address this problem proactively now, rather than in a rush when ToU tariffs will be permitted and/or required, is a much more preferable approach.

## 7.2 The Victorian DBs approach

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

That this absence is not addressed by the AER is of concern as the Rules clearly require the AER to ensure that the development of tariffs from the allowed revenue.

In particular the EUCV considers that there needs to be some planned approach to limit the extent of concurrent widespread operation of specific items of power consuming equipment such as refrigerative air conditioning and pool pumps. The EUCV would support approaches by DBs to be able to "levelise" the demand placed on the networks by such equipment so that network capacity is not built to match the concurrent use of such equipment.

The EUCV considers that the AER should encourage the DBs to develop tariffs which will give them the ability to cycle such equipment remotely in order to reduce the peak demands placed on the network whilst allowing consumers to have the benefits that accrue from having such equipment available to them.

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 minimized. 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 recognize 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.