Energy Users Coalition of Victoria

Australian Energy Regulator

Victorian Electricity Transmission Revenue Reset

AER Consultants Reports

A response

by

The Energy Users Coalition of Victoria

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Executive Summary

The Energy Users Coalition of Victoria (EUCV) welcomes the opportunity to provide comments on the AER's consultants' reports relating to the revenue reset for the Victorian electricity transmission system.

The EUCV represents a number of large energy using companies in Victoria.

As a significant proportion of the AER's revenue review is dependent on consultants providing expert advice on key elements of the review. Accordingly, the independence and rigour of experts' analyses must be paramount. In the main, the work undertaken has been of a very high standard.

The EUCV, however, points to a number of areas where we counsel the AER, would require further work to rectify perceived and revealed shortcomings.

Comments are provided on the following issues:

1. The risk free rate and the debt and equity margins

2. SPA's wage costs

3. Roll in of past capex, adjustments to ex ante capex allowance, prudency and efficiency of specific projects

4. Further capex and opex and service standards.

These issues will also be discussed in the overall context of the EUCV's response to the AER's draft decision, currently in preparation.

1. Introduction

1.1 The EUCV

The EUCV welcomes the opportunity to provide comments on the AER's consultants' reports relating to the revenue reset for the Victorian electricity transmission system.

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

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

The members of EUCV have identified that transmission plays a pivotal role in the electricity market. This role encompasses the ability of consumers to identify the optimum location for investment of its facilities and providing the facility for generators to also locate where they can provide the lowest cost for electricity generation. Equally, consumers recognise that the cost of providing the transmission system is not an insignificant element of the total cost of delivered electricity, and due consideration must be given to ensure there is a balance between the two competing elements.

1.2 The scope of this review of consultants' reports

EUCV recognises that a significant proportion of the AER review (and its draft determination) is dependent on the reports provided to it by various consultants, expert in different elements of the review.

The EUCV notes that the AER has retained a number of consultants, viz:-

- ⇒ RBA and Commonwealth Treasury to advise on the risk free rate used in the WACC development
- ⇒ Professor Handley to advise on the implied expected inflation rate using indexed and nominal government bonds
- ⇒ Allen Consulting Group to assess the costs of equity and debt raisings
- ⇒ Econtech to assess wages growth
- ⇒ Nuttall Consulting to review the non-contestable allowances for rolling into the RAB

- ⇒ Nuttall Consulting to review the AER's adjustments to SP AusNet's proposed forecast capex allowance
- ⇒ PB Strategic Consulting to undertake an ex post review of the actual capital expenditure for integrating into the RAB
- ⇒ PB Strategic Consulting for a review of the proposed capital expenditure which sets the proposed capital expenditure for ex ante approval
- ⇒ PB Strategic Consulting to review the proposed operating expense and service perfomance

This submission provides EUCV views on the consultants' reports.

1.3 Subsequent responses from SPA

EUCV notes that SPA has responded to the AER draft determination and released an adjunct to its application. The bulk of this response relates to SPA essentially seeking to retain its initial proposal in terms of revenue. The net revenue for the 6 year period reduces by an average $10m pa over the entire period (a reduction of 3%). The bulk of the revenue reduction is related to opex adjustments, as SPA has only modified the timing of its proposed capex, resulting is a more consistent annual spend but having the same amount expended overall.

SPA states that its changes will basically result in the average tariff remaining static in real terms. In part this statement has some validity if the SPA forecasts for growth are accepted (which EUCV does not accept), but this also excludes the very significant step change increase of some 10% from current tariff levels. Effectively, SPA has paid lip service to the AER draft determination requirements.

In its revised submission, SPA maintains the view that it is (comparatively) the most efficient and best performed TNSP in the NEM. The EUCV considers that this is to be expected bearing in mind the meshed nature of the Victorian system and the high density of power used relative to geographic area. Notwithstanding the basic benefits arising from this,, SPA appears determined to increase its revenue to reduce the cost differential between it and its comparators.

2. The WACC

There are two elements of the WACC that are addressed by the AER consultants

- ⇒ The risk free rate (RBA, Treasury and Handley)
- ⇒ The debt and equity margins (ACG)

2.1 The risk free rate

SPA included in its proposal a view that the risk free rate as determined by government 10 year bonds (nominal and indexed) was understated. SPA had used a report by NERA to identify that the nominal risk free rate was understated by some 20 basis points, and that the indexed rate was understated by at least 80 basis points.

The argument provided in support of this view was that the lack of government borrowings (resulting from the retirement of debt due to asset sales and budget surpluses) had provided a scarcity element to the purchase of bonds by increasing the sale value and therefore reducing the yields.

It is clear from the advice from the Reserve Bank and the Commonwealth Treasury that there is some support for this view with regard to indexed bonds. Both remark that indexed bonds are being phased out, and that competition for these might have increased the purchase price, resulting in a deflated yield.

At the same time both were extremely strong in their view that this impact had not been an issue with regard to nominal bonds, as the government had made a decision that there was a need for such bonds to be issued, in sufficient quantities, to ensure that the strength of the bond and its yield would remain unchanged with respect to the bases underpinning previous issues of these bonds. The government recognised the need for continuity in both the presence of these bonds, and for the bases for the market to accept that there was no underlying variance between bonds issued before or after a given time.

The members of EUCV also seek funds from financial markets and they concur with the view of the Commonwealth Treasury (and the RBA) that the bases for the current bond issues are consistent with earlier issues.

The EUCV is strongly supportive of the commentary provided by the RBA and Treasury in their advice that the NERA contention in relation to nominal bonds is unfounded, and should be disregarded by the AER.

The EUCV also accepts the commentary by both official institutions in regard to indexed bonds. EUCV members have seen the reducing availability of indexed bonds, and accept that scarcity would impact on the sale price (by increasing it) and therefore would deflate yields.

That this has occurred is not as critical as first seen. Nominal bonds have always been the basis on which the risk free rate is set – indexed bonds were used to assess the likely inflation rate in the coming period; that is, these in conjunction with nominal bonds, provided a measurable value of the expectation for future inflation. Historically, the Fisher equation was used to interpolate an expectation of future inflation from these two bond inputs.

Handley is of the view that nominal bonds are based on essentially unchanged conditions, concurring with the RBA and Treasury in regard to nominal bonds. He does, however, conclude that it would be inappropriate to develop a forecast view of inflation by using the two bond rates.

This view is replicated by the Victorian Essential Services Commission (ESCV) in its recent determination on the gas distribution businesses. Here, the ESCV accepts that there is unlikely to be a sensible forecast of inflation from using indexed bonds alone, and it therefore addresses forecast inflation using a number of different approaches.

The ESCV noted that using the raw data on bond yields, the three gas distributors (including SP Ausnet), had developed forecast inflation as 3.08% (Envestra), 3.14% (Multinet) and 3.3% SP Ausnet)[1]. Each of the three businesses had adjusted these forecasts on the basis of NERA advice to give inflation forecasts in the range 2.50-2.56%. The ESCV conclusion[2] is:-

> *Conclusion*
>
> The Commission is of the view that consistency with prevailing conditions in the market for funds and the risk involved in delivering the Reference Services requires that the Rates of Return proposed by the distributors should be assessed with reference to a real risk-free rate of 3.12 percent. This value is derived by adjusting the observed yield on nominal bonds (6.21 per cent – average to 20 June 2007 adjusted to an effective annual rate) by an inflation rate of 3.0 per cent.

[1] ESC gas access review 2008-2012 draft determination 28 August 2007, table 10.3

[2] Ibid, pages 382 and 383.

The EUCV notes that the RBA, Treasury and Handley all concur with the observation made by EUCV in its response to the SP Ausnet submission, that it is incorrect to assess that the risk free rate (as determined by the 10 year nominal bond rate) is understated.

As EUCV pointed out earlier, if this was the case then the entire development of the risk margin would have to be reassessed, as the fundamental principle of the CAPM approach, is that the risk premium is the amount between the accumulation index and the 10 year bond rate.

What the AER has to do is to develop a methodology to determine the "real" risk free rate using the nominal bond rate as the basis of setting the "real" risk free rate. The EUCV suggests that the AER follow an approach similar to the ESCV, which faced the same problem for gas distribution.

The ESCV was of the view that the forecast inflation was 3% at the end of August 2007. Based on recent data, it could be assessed that the future inflation rate could well be a notch higher.

2.2 Debt and equity margins

The AER retained Allen Consulting Group (ACG) to provide a view as to the premium above the risk free rate that SP Ausnet would have to pay to secure debt funding and equity funding in order to cover the accessing of equity and debt required for the business.

ACG develops a view that accessing equity and debt are essentially two different activities.

Equity is sourced once (whether for the initial acquisition) or for providing equity for when capital is required for new investment (capex). Thus ACG opines that sourcing of equity is a "once off" cost, and therefore the costs are inappropriate to be included in the WACC. ACG suggests that the equity raising costs should be included in the asset base and then depreciated.

Debt is sourced on a recurrent basis, for example, debt is accessed for a limited period and then refinanced. Equally, additional debt would be needed for new capital requirements, but effectively ACG considers that this additional debt would be incorporated into the recurrent roll forward process.

The EUCV would concur that the ACG approach is sound and replicates the actuality of the funding processes. EUCV notes that their development of the actual costs for the provision of debt indicates that previous assessments by regulators (Including the ACCC) have been overstated.

ACG recommends that debt premiums should be reduced from previous levels, but still be incorporated in the WACC calculation.

With regard to how best to address the recovery of equity raising costs, ACG points out that as the RAB values for electricity transmission businesses have been set, it may be difficult to implement their recommendation for including equity raising costs in the RAB roll forward process.

Equally, ACG states that with respect to the regulatory process used in the UK (which is very similar to that used in Australia), UK regulators have excluded equity raising costs from the RAB as they consider that these costs have already been included in the initial establishment of the businesses (page viii)

> "In the UK, which operates under a similar benchmark approach to financing arrangements as Australia, IPO costs have not been allowed on the grounds that they were incurred by the UK Government during privatisation. OFWAT and OFGEM have indicated that SEO[3] transaction costs would only be considered on a case–by–case basis."

In the case of most of the Australian electricity transmission businesses, they are still owned by governments and in the case of the Victorian and SA transmission businesses, they were established by governments as corporations prior to subsequent sale. Further, as these businesses were "owned" by governments prior to corporatisation/privatization, using revenues raised from the public/users, it is inappropriate for them to be charged a second time for costs that were never incurred.

Thus there is little reason to include the establishment costs for equity in the RAB.

ACG points out (page xv) that in fact the acquiring businesses probably did not incur any equity raising costs anyway.

> "Case studies are provided for GasNet and CitPower, whose bond issues account for 90%–120% of their respective RAVs. This evidence indicates that regulated utilities can, and do, raise bonds in the market to a value equal to, or greater than, the debt component of their RAV."

If the businesses have already been corporatized and their equity raising costs have been absorbed by the owning government, and then if they were to raise debt well above the notional benchmark of 60% debt, this would allow the

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[3] Seasoned Equity Offer — one that comes after and IPO

businesses to utilize the regulatory approach to the detriment of consumers who are required to pay an overstated revenue to the businesses. Permitting a business to double dip in such a fashion is not acceptable.

However, the ACG approach can, and should, be used by the AER for the equity raisings needed for the equity potion of capex. This does not run counter to the requirements of the AEMC Rules determined in 2006, and recognises the reality that additional equity has to be notionally raised for new capital investment.

With regard to the issue of equity raising costs, ACG recommends that these costs should be depreciated with the RAB. EUCV does not agree with this approach as it implicitly permits double counting. Once cash is raised, it is not lost, although the asset it purchased might no longer be used and useful.

Consider the following example.

A new investment costs $100. Of this (assuming 60% gearing) $60 is secured by debt, and $40 is secured by a new equity raising. The equity element incurs costs of (using ACG recommended cost of 3%) $1.20 to acquire the cash. The regulatory approach allows the recovery of the $40 over the life of the asset (ie the depreciation). This $40 is returned to the owner over the regulatory depreciation period. Thus at the end of the period the owner has the $40 of cash that it raised earlier – this is $40 of cash that it can use to offset the purchase of the replacement asset, effectively providing a portion of the new equity required to purchase the replacement asset.

The new asset is provided under the new capex allowance, on which the owner is allowed its 3% premium for the new equity raising. In fact it already has $40 of the cash it needs if it would have recovered if it had been allowed to depreciate the equity raising costs with the asset.

Thus either the equity raising costs should not be depreciated or the allowance for the equity raising costs for new equity, should be discounted to recognise that part of the equity has been previously raised and returned to the owner.

The ACG report seems to imply that an IPO which is used to provide the cash for acquisition of the asset should be included as an equity raising cost. The EUCV would strongly oppose such an approach. The equity is raised only once. Even if there are subsequent sales of the assets to other parties, then these are not costs that should be considered in the regulatory assessment.

3. Labour costs

SPA had advised the AER that the reasons for its increases in opex and capex were attributed to labour costs increasing at a rate exceeding the CPI. The EUCV had provided the AER with a statement regarding labour costs that there had been no change in the rate of labour cost increases before the current period and during this period, and therefore the SPA claim for increased costs due to labour cost increases was unsustainable.

Econtech P/L was requested by the AER to examine the SP Ausnet forecasts of labour cost increases.

Econtech is of the view that the costs for labour needed by SPA and VENCorp over the next 6 years will outstrip the state average of wages growth, effectively supporting the view put by SPA and its consultants. This is depicted in table 6.4 on page 39 of its report. The detailed development of its reasons based on various forecasts appears consistent with the methodology used by other forecasters.

Table 6.4
Labour Cost Growth Rates in Victoria, 1995/96 to 2015/16 (%)

	Mining	Electricity, Gas & Water	Construction	Overall Victoria
1995-1996	14.9%	3.9%	4.4%	3.7%
1996-1997	18.7%	3.4%	3.5%	1.7%
1997-1998	23.8%	9.0%	11.1%	4.8%
1998-1999	2.5%	0.2%	-5.7%	1.4%
1999-2000	-8.8%	11.8%	-6.4%	1.6%
2000-2001	-1.7%	6.6%	3.6%	4.6%
2001-2002	-6.4%	7.5%	2.7%	4.9%
2002-2003	31.4%	1.0%	15.9%	7.7%
2003-2004	15.9%	-2.0%	4.1%	4.6%
2004-2005	2.8%	2.8%	-0.7%	2.7%
2005-2006	5.2%	4.1%	7.2%	4.4%
2006-2007	5.7%	1.8%	2.1%	2.9%
2007-2008	4.3%	5.9%	4.6%	5.5%
2008-2009	3.9%	6.0%	4.3%	5.1%
2009-2010	3.8%	7.6%	4.9%	5.4%
2010-2011	3.5%	7.0%	4.9%	5.2%
2011-2012	3.6%	6.2%	4.8%	5.1%
2012-2013	3.9%	5.9%	4.8%	5.0%
2013-2014	3.8%	5.6%	4.4%	4.5%
2014-2015	3.2%	5.0%	3.4%	3.5%
2015-2016	2.7%	4.7%	3.4%	3.5%

Source: LCM

Econtech provides support for its forecast by reference to the growth in Utility sector wages during the late 1990s and early 2000s. EUCV is of the view that there are some inconsistencies in this approach by Econtech.

1. There is an assumption that there was wages growth during the deregulation process. In fact, there was no significant growth in wages per se during this period, but a culling of large numbers of lower paid worker positions. The Utility sector was renowned for this practice as it transited from being directly government controlled to being corporatized. The direct result of this culling process was a statistical increase in wages paid (including for redundancies and such like) rather than a process of massive wages growth.

2. The technical skills needed by the Utilities sector fall into two distinct categories – operations and maintenance labour and construction labour. There is a distinction drawn between by Econtech between Utilities and construction sectors, yet this does not exist in reality as the bulk of new investment by the Utilities sector is carried out as construction activity. Many of the skills needed for operation and maintenance in the utilities sector are similar to those needed for construction and mining[4], yet Econtech develops its theme based on the concept that they are quite different. Thus for Econtech to develop a model which delivers different outcomes for different industries seeking the same skills set seems to be counterintuitive.

3. Econtech draws comparisons between mining, construction and Utilities in Victoria, and opines a view that all will be subject to the pressures for mining and infrastructure in other states. However, Econotechj then determines that there will be differing outcomes for each of the Victorian sectors examined. This again appears to be counterintuitive.

4. There is no analysis of the statistical errors that can occur in what are relatively small samples of employment. Mining and Utilities sectors in Victoria employ a relatively small proportion of the total Victorian labour force, and as a result apparently large proportional changes can be the result of a relatively small number of very large wage movements.

5. Some better analysis is required to assess whether the wages growth forecasts reflect the actuality of the labour forces used in each of the

[4] This is evidenced by many of the businesses offering maintenance services are or have been construction companies

> sectors. Econtech makes the rather surprising statement that as the "…electricity, gas and water industry employs a large proportion of electricians, electrical engineers and engineers…" this reflects the wages pressures resulting from the skills shortages endemic in the country. In fact, the numbers of employees with these skills needs is not as high as needed for the Utilities sector, for example, when compared to the construction industry. What Econtech should do is to analyse changes in the median wages rather than the averages of total wages, as the median wage is more reflective of the wages cost for the bulk of the work force.

These important inconsistencies in the Econtech work can have a significant impact on the forecasting process.

Econtech attempts to provide some qualitative reasoning behind its forecasts. For instance, on page 41 Econtech opines that:-

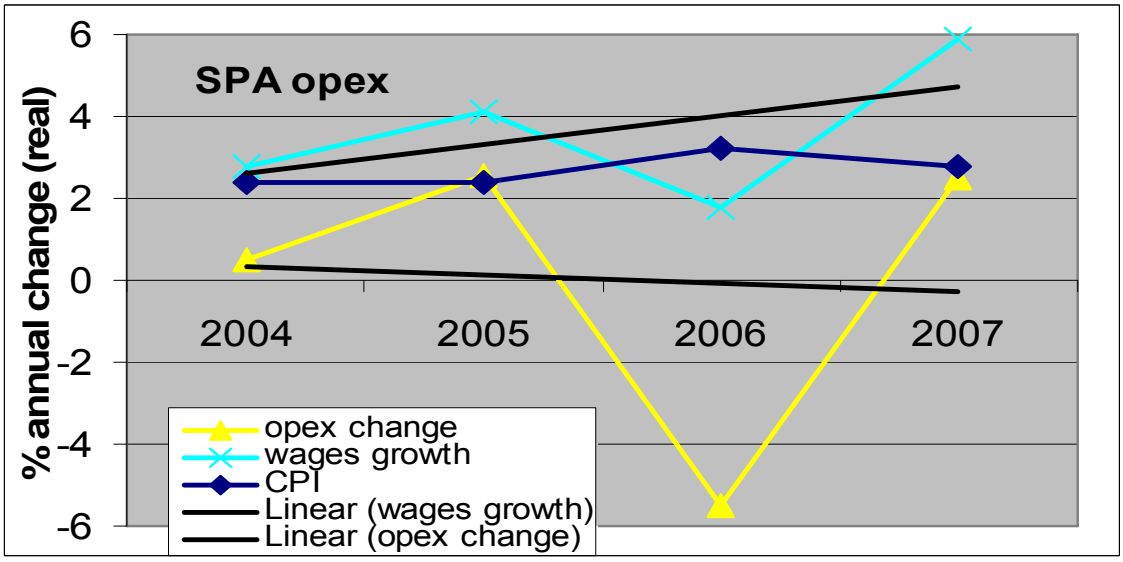
> "The historically higher wage growth in the utilities sector has largely resulted from the recent restructuring in the electricity, gas and water industry. The drive for increased productivity in the industry is expected to have led to a fall in lower-skilled workers, as the industry continued to become more capital intensive. As the lower-skilled workers were displaced, strong growth was achieved in the average wages in the industry.
>
> Higher wage growth in the utilities sector, at the national and state levels, is expected to continue due to a number of different factors. In particular, as mentioned in the earlier section, the utilities sector is experiencing the scarcity of skilled labour that is currently affecting most of Australia.
>
> The electricity, gas and water industry employs a large proportion of electricians, electrical engineers and engineers. As such, it faces competition from industries such as the construction industry and the mining industry for the same type of skilled workers. With the mining and construction boom expected to last for another couple of years, this will continue to boost wages in these industries. In turn, wages for the utility sector will need to also increase so the industry can continue to attract skilled workers."

As noted above the inconsistencies are perpetuated. Apparent wages growth in 1990s was more a result of culling lower paid jobs, resulting in a statistical increase in average Utilities wages.

The need for skilled employees in the mining and construction sectors is just as high a priority as in the Utilities sector, yet the wages growth is forecast to be higher.

Nearly all of the capital expenditure of SPA and VENCorp (and indeed most of the businesses in the Utilities sector) is contracted out to construction businesses. Even much of the maintenance activities are contracted out to other businesses. If such a large element of the work assumed to be included in the Utilities sector is contracted out and therefore not included in the Utilities direct workforce, then to what degree is the development of a Utilities wages index representative of the actuality of the assumption that the Utilities sector wages growth is directly related to the costs incurred?

The EUCV is of the view that as there is such a disconnect between the outcomes for the three sectors quantified by Econtech, and as it is assumed that all three are subject to essentially the same pressures from competition for skilled labour, there has to be a reason for the disconnect. This could very well be that the Utilities have reduced their direct work forces significantly during deregulation, mainly by culling lower paid workers. This has been exacerbated by many of the Utilities electing to contract out construction and maintenance functions, resulting in the Utilities retaining a small core of highly paid employees to supervise contracted out work. The EUCV supports this approach to contracting out (in fact many members of EUCV also contract out elements of what were previously considered core activities) as it can result in significant efficiencies. This is demonstrated by comparing the actual opex (operation and maintenance expenditure) of SPA and relating this to the wages growth seen by Econtech.



Source: Econtech report and SPA application

It should be noted that the actual change for 2007 is based on an estimate of 2007 opex rather than actual opex and that the CPI over the period was relatively static.

Whilst there is a degree of similarity in the shape of the two curves of actual opex in a year compared to the measured (estimated in the case of 2007) change in wages growth, the trend lines tell a different story. The comparison graph also points out that that a wages growth of 3% resulted in almost no movement in opex.

The EUCV is of the view that

- **The expected higher wages growth forecast for the Utilities sector over the next few years using the Econtech methodology has to be treated with extreme caution, as the Utilities wages are not necessarily representative of the employment profile of SPA.**
- **There is not a sufficiently close a relationship between wages growth and actual opex to be able to confidently extrapolate an increased allowance for opex based on expected wages growth.**
- **Capex is more related to wages growth in the construction sector than to the Utilities sector, and therefore the construction sector wages growth is more likely to be representative of capex growth for the Utilities sector.**

4. Current and planned project costs

Under the previous regulatory arrangements, the regulator is required to carryout an assessment of incurred capex to verify that the capex incurred was prudent and efficient before rolling this into the RAB, and that the roll in of the capex is carried out in accordance with the Rules.

Nuttall Consulting was retained by the AER to assess the methodology used by SPA for rolling in the prudent and efficient capex, and to undertake a review of selected projects to ensure the allocation of capex complied. Initially, Nuttall investigated the roll in of five projects but ultimately carried out a review on seven projects due to errors found in the first five.

Unfortunately, the EUCV was unable to make any assessment of the approach and considerations of past projects reviewed as the AER has determined that this element of the Nuttall work is confidential. The EUCV sees that there is no reason for this to be considered confidential and requests that the AER release this information. This is especially important given the information of errors formed in the first five projects examined by Nuttall.

As part of its assessment of capex and opex, PB Strategic Consulting was retained to assess the prudency and efficiency of some past projects and some planned projects. These reviews are included in appendices A through Q.

4.1 Roll in

Nuttal found errors in the roll in and had to repeat the exercise because of that fact. Nuttall subsequently recommended that the roll in methodology be adjusted down by 3%.

The AER advised on 12 November that:-

> "The review by Nuttall Consulting related to contracts for non-contestable works between VENCorp and SP AusNet. These documents are, by their nature, commercial in confidence.
>
> The National Electricity Rules allow SP AusNet to roll-in the value of these contracts - the work undertaken by Nuttall Consulting was an exercise in verification, designed to act as a check on the relevant inputs to the AER's approved models."

The import of the Nuttall review is that it is an assessment of the methodology used by SPA for rolling forward the capex into the RAB. Nuttall found that there were errors in the methodology and has recommended changes as a result.

The EUCV is not able to assess the veracity of the Nuttall recommendation nor its efficacy, as the AER has determined that the information needed to demonstrate the efficacy of the Nuttall work is commercial in confidence. Despite this confidentiality, the AER will permit large elements of the work covered by this confidentiality to be included in the RAB, and therefore require consumers to pay for the work that others have alleged has been carried out.

4.2 Review of AER adjustments to ex ante capex allowance

The AER retained Nuttall to carry out an analysis of the relevant work

> "…the AER has undertaken to inform its draft decision on SP AusNet's maximum allowed revenue during the 2008/09 to 2013/14 period. The AER's analysis concerns SP AusNet's proposed ex ante capital expenditure allowance, and specifically, the extent to which the findings of the detailed project reviews can be extrapolated across the balance of the proposed expenditure allowance."

The AER had reached a preliminary view that the capex claimed by SPA was too high and that it intends to reduce the amount of capex claimed by some $176m over the six year period. Nuttall has been provided with SPA explanations supporting its valuations for its proposed capex, and using this has assessed the reasonableness of the AER views on capex allowances.

Nuttall has identified an issue that EUCV had also noted in a previous submission – that the NPV assessments used by SPA to support the replacement of "used and useful" equipment that is still in reasonable order and has not reached its "use by" date, relies almost entirely on the valuation provided by SPA of the costs to keep the equipment in working order.

EUCV has previously commented that regulated businesses have a real driver to increase capital expenditure as under the building block approach, the only source of profit growth for the business is through capital expenditure – all other sources of income are effectively related to the costs the businesses incur.

EUCV points out that the capex allowance is an ex ante amount, and that there will be no ex post review of the prudency and efficiency of the actual capex. Further, the Rules permit the regulated business to use the capex allowance in any way the business chooses, even if a new use is not contemplated at the time of the reset.

This permits the regulated business to use its capex as the business wants. If at any time SPA sees that there is a greater need for using its allowed capex for a purpose (eg for the purposes which Nuttall and the AER consider at this stage are not prudent and efficient for this reset period), SPA has the right to redirect its allowed capex to this new purpose. If this redirection causes delays to other projects, the risk to SPA is still minimized as SPA can commit to these projects later in the period and incur little risk as the Rules permit actual capital expenditure incurred to be automatically rolled into the RAB, even if this amount exceeds the allowed capital expenditure.

Accordingly EUCV agrees with Nuttall in its conclusions that the draft AER determination to reduce the amount of claimed capex will not create a situation where SPA will not be able to continue to maintain the quality, reliability and security of the transmission network.

4.3 Specific projects assessed for ex post and ex ante review

Capex incurred in the current period is to be assessed ex post for prudency and efficiency.

PB carried out project assessments of a number of projects executed in the current period. PB examined in detail nine projects carried out in the current period for ex post analysis. It made recommendations to accept all of the costs and the timing of the costs for all nine projects. On the basis of there random assessment, PB recommends that the projects carried out in the current period be accepted as prudent and efficient.

Notwithstanding this acceptance of the projects by PB, the review of the PB assessment does lead to some interesting conclusions and provide doubt regarding the veracity of the conclusions reached by PB:-

- PB makes no attempt to assess the valuations provided by SPA on the “do nothing” option. In fact, Nuttall raises this issue (but only in passing) when making its assessment of the future capex assessment.
- Despite SPA noting in a general way that capital expenditure for replacement should impact on the amount of opex needed, the assessment of costs for each project do not quantify any such opex savings
- PB fails to identify that there seems to be an underlying attitudinal approach (yet is identified by Nuttall) that if a problem is identified (eg when an asset is an “only child” in the fleet) the immediate response by SPA is to replace the asset, regardless of its condition.
- PB seems to accept that if a decision is in line with the SPA management strategy, then this is sufficient reason to support the proposed action,

regardless of other factors, such as the asset is still used and useful, and has a remaining economic life.

- PB notes that the documentation of the SPA decisions for capex is often lacking. In the case of the assessment of the Brunswick terminal station redevelopment, PB notes:

    - that for such a major and complex (i.e. high risk) project, the standard of project documentation is relatively poor. SPA should be encouraged to ensure that decisions that underpin major project costs (and variations) are well documented and supported by appropriate record keeping practices
    - that the extent of the cost benefit documentation was not appropriate for a project of this scale and complexity (i.e. high risk)
    - that the analysis and documentation of project variations was inadequate

Yet despite these criticisms (and repeated for other projects), PB (curiously) accepts that all projects were prudent and efficient!

This approach by PB to the ex post review of the nine projects seems to be in stark contrast to the approach taken by PB for the ex ante review of the six future projects proposed by SPA.

In the ex ante review, PB takes a strong view on the reasonableness of, and assessment by, SPA. In fact, it decreases the allowance claimed by SPA in every case. SPA claims $228.1m for these six projects (some 27% of the total capex claimed) and PB rejects $100.7m of the cost for these six projects accepting only $127.4m is legitimate.

PB provides a detailed assessment of the project supporting its recommendations and in the absence of assessing the information itself, EUCV must accept the assessment by PB. EUCV does note that PB goes so far in its assessment of future projects as to state that in some cases the SPA claim for capex is not prudent or efficient.

What does concern EUCV is that if SPA is so wrong regarding the new projects, why PB accepts that all previous capex by SPA have been accepted as prudent and efficient. On the balance of probabilities, this is hardly likely. PB's assessment is very curious and the AER must exercise rigour in this area.

5. Capex, Opex and service standards

The AER retained PB consulting to examine the application of SPA in relation to past capex, future capex, benchmark performance, opex and service standards. This is the major consultant review carried out for the AER.

5.1 Past capex

The EUCV comments on the review of actual projects reviewed by PB are included in the previous section. This section develops the previous EUCV observations on the approach to assessing the entire capex program ie extrapolating for the few projects considered for the inclusion of roll forward of capex for all projects.

As noted earlier EUCV raises a basic concern that if future projects assessed by PB were so greatly criticized by PB (to the extent of recommending excision of nearly 50% of the amounts claimed) why there is apparently a much lower standard used for assessing inclusion of completed projects. The alternative view is that SPA's ability to assess projects has deteriorated greatly.

PB also was extremely critical of the quality of documentation substantiating these projects, yet still accepted the amounts claimed without change. On page 40, PB states:

> "SPA's project execution tracking process is contemporary and auditable, but has not necessarily precluded some projects running over budget and examples of poor project management."

Given the qualifications made by PB in relation to past projects, it is of grave concern to EUCV that PB still is of the view all of the past capex is prudent and efficient. Some of the statements made and the recommendations would appear to be at odds with each other. EUCV leans towards the view that a lower standard of assessment was used for past projects. We again urge the AER to exercise rigour in this area.

The EUCV notes that PB has recommended inclusion of all past capex in the RAB. This recommendation is based on extrapolating PB assessments of nine individual projects which comprised 25% of the total capex. The EUCV considers that this extrapolation is fundamentally flawed.

PB was critical of SPA documentation practices, but used this inadequate documentation to determine the expenditure was prudent and efficient. As the

documentation is inadequate then no sound conclusions can be made. Yet PB has ignored this and then used this as the basis for extrapolation.

PB has assessed future capex to be 50% overstated (based on the six projects assessed). A 50% error in incorporating past capex will cost consumers some $20m each year. It is incumbent on PB to carryout an assessment process on past capex as rigorous as the one it undertook for future capex.

On the balance of probabilities, EUCV is of the view that PB has recommended inclusion of past capex into the RAB that should not be accepted.

5.2 Future capex

PB investigated six projects in detail. Based on this assessment it extrapolated an amount deemed reasonable for inclusion in the reset. As noted in the previous section, these six projects were claimed by SPA to be valued at $228.1 and the PB review valued the work needed to be $127.4m – an effective discount of ~43%.

The projects assessed by PB comprised 28% of the total capex claimed by SPA. The PB recommendation is that 85% of the SPA claimed capex be accepted. Implicitly, this means that of the other 72% of capex claimed (ie ~$567m) PB has recommended that all but $19m be accepted (ie that 97% of the capex is recommended for acceptance. The $19m that is not accepted is the amounts included by SPA for contingencies in various projects and therefore implies total acceptance of all capex claimed other than for the six projects examined.

EUCV reviewed the detailed analysis PB carried out on the six projects assessed in detail. As noted above, this appeared to be rigorous (much more so than that for the past capex) and in the absence of the detailed information provided to PB, EUCV accepts the work. What appears to be at odds is the bland acceptance of the balance of the capex not assessed.

PB makes no attempt to extrapolate any of the conclusions it makes with regard to the six projects assessed, and accepts all of the non examined capex with little comment. PB states on page 120, its acceptance of all capex other than the six projects and contingencies is

- "…based on an assessment of high-level inter-business benchmarks across a range of measures, it is evident that the combined SPA/VENCorp proposed capex is at or below that of the average when compared with other Australian TNSPs, but that SPA's replacement capex alone is relatively high

- based on a top-down intra-business depreciation-based assessment, SPA's forecast capex aligns quite strongly with the expected level of depreciation over the 2008/09 to 2013/14 regulatory period, indicating that the weighted average age of the network across various asset categories will be held stable
- the processes used to estimate project costs are reasonable and the unit costs that form the basis of SPA's project estimates are generally efficient and with PB's benchmarks
- all of the expenditure associated with our detailed and high-level review of SPA's ex-post (historic) capex over the period 2002/3 to 2007/08 was found to be timely, reasonable and efficient
- the service standards proposed by SPA are consistent with past practice and will ensure key performance measures associated with service delivery will be maintained
- the processes and outcomes of SPA's operation and maintenance cost forecasts were generally found to be reasonable and efficient and required only minor downward adjustment
- our review of the governance, approvals processes and systems set in place by the SPA Board, which (consistent with the standards expected of a publicly listed company) indicate well-established and documented process leading to the approval of capex and opex, and at a high level ensure good electricity industry practices are captured within its asset management functions."

This ringing endorsement of SPA:-

- assumes that comparisons made with other TNSPs is sufficient without any examination as to the differences between them (for example every other TNSP claims that it is different to the others – especially to Victoria which all the others consider is the closest to being a distribution network due to the high density of usage and small geographic area
- concludes that the amount of capex holds the average age of the assets constant and therefore must be correct
- considers that despite poor documentation, some poor project management and significant over estimates of future capex needs for identified projects, SPA has good processes in hand to set its capex budget correctly
- assumes that its current achievement of service standards supports the need for this additional capex, but neglects to address the fact that SPA is proposing to reduce its service standards despite this significant increase in capex
- is at odds with the major changes recommended by PB to be made to the six future projects examined in detail

- is based on the assumption that PB agrees with the proposed opex, then the capex must be acceptable
- assumes that a well run (public) business will not attempt to seek to increase its profitability by requesting amounts in excess of its needs
- supports the SPA expenditure programs for each project despite PB having concerns that the durations might be overstated and front end loaded, indicating that SPA might also be optimizing its capex cash flow to enhance its returns

SPA has claimed a large amount (some $8m pa) for business IT upgrade and replacement. PB asserts that this amount (subject to some accounting errors) is reasonable. Unfortunately, PB makes no attempt to show that its conclusion that this expenditure is prudent and efficient, other than aver that it is. For such a large element of expenditure, EUCV would have expected PB to have assessed the business case for this amount and to have shown that the expenditure will deliver (from the consumers' viewpoint) a return from the investment.

It is noted that PB also supports the approach used by SPA to assess the future costs of equipment and hardware for use in the capex forecast. Of concern to EUCV is that PB only makes reference to forecast changes in prices of electrical equipment rather than addressing the whole range of SPA input costs which are much wider than copper and transformers.

The EUCV comments on forecast labour costs are included in a foregoing section.

5.3 Future opex

PB has assessed that the SPA claim for opex is reasonable, subject to a number of (very) small adjustments which effectively reduce the claimed opex by ~6.5%.

To assess the opex PB carried out a bottom up assessment of the claimed opex with minimal reference to the historic opex. PB accepted prima facie that SPA:

- SPA's increasingly efficient operation was due to the integration of transmission and distribution businesses, rather than other causes
- ITOMS benchmark performance indicates good (cost) performance, without addressing the underlying reasons for this (so clearly enumerated by the other Australian TNSPs) when the Victorian TNSP performance is used as a benchmark for them
- Wages will increase in real terms without any assessment whether historically these implied wages increases really do apply to SPA (refer to EUCV observation in section 3 above)

- That the SPA management fee arrangement is a legitimate charge. In this regard EUCV points out that ESCV examined this self same issue in relation to the SPA gas distribution business and concluded[5] that this was not a legitimate expense to be included in the regulatory opex.
- That SPA had calculated a capex/opex trade-off and included this in its forecast. What PB did not do was to assess whether these trade-offs bore any relation to the estimated savings assessed in the business cases for accepted past capital expenditures.

What is of even more concern is that PB did nothing to assess the allocation of the SPA opex. SPA opex is approximately allocated[6] as follows

- Recurrent $25m pa
- Corporate $20m pa
- Insurance $ 3m pa
- Asset works $10m pa

$68m pa

This breakdown identifies a number of issues.

Refurbishing works (referred to as assets works) comprises ~$10m pa. The bulk of this work is repairing towers and cables. PB summarises the asset works in table 7.6

Table 7-6 – Asset work costs 2003/04 to 2013/14

Expenditure $m (2007/08)	02/03	03/04	04/05	05/06	06/07*	07/08*	08/09	09/10	10/11	11/12	12/13	13/14
Corrosion/ Condition	4.8	11.9	11.6	8.1	8.4	9.0	12.2	13.2	14.1	14.1	14.1	14.1
Support	0.5	0.6	0.5	1.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Total	5.3	12.5	12.1	9.1	9.8	10.4	13.6	14.6	15.5	15.5	15.5	15.5
Benchmark	5.4	13.7	13.5	13.6	13.8	13.9	n/a	n/a	n/a	n/a	n/a	n/a
Difference	(0.1)	(1.2)	(1.4)	(4.5)	(4.0)	(3.5)	—	—	—	—	—	—

This indicates that SPA was permitted ~$3m pa more for these works during the current period than was actually used. SPA has claimed the benefit of a supposed saving yet the work was not completed and it would

[5] ESCV draft determination gas access arrangement review 2008-2012 pages 90, 91
[6] SPA application

appear that SPA proposes to carryout this uncompleted work in the next period – at a higher cost – effectively double dipping or being paid for the same work twice. PB has made no attempt to assess the legitimacy of the claim or if there was work expected for the current period but now rescheduled.

As well as some works being transferred, PB has implicitly allowed SPA to increase the cost of this uncompleted work by allowing SPA to inflate the costs due to acceptance of higher wages costs.

Corporate costs are nearly 30% of the total opex claim. Put another way, for every two people who are physically carrying out work in the field, there is one person in head office. This ratio clearly demonstrates a lack of veracity of the costs claimed.

Table 7-3 – Corporate opex costs 2003/04 to 2013/14

Expenditure $m (2007/08)	02/03	03/04	04/05	05/06	06/07	07/08[a]	08/09[a]	09/10	10/11	11/12	12/13	13/14
Finance	2.0	5.2	4.9	4.7	2.9	2.9	3.0	3.1	3.1	3.2	3.2	3.3
HR	0.4	1.5	1.7	2.2	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
IT	0.8	2.6	2.7	3.9	3.9	3.9	4.0	4.0	4.1	4.1	4.1	4.2
Other corporate	0.9	3.5	4.7	5.4	3.1	3.2	3.2	3.2	3.3	3.3	3.4	3.4
Management fees	0.0	1.6	1.5	3.1	7.4	7.6	7.8	8.0	8.3	8.5	8.7	9.0
Total	**4.1**	**14.4**	**15.5**	**19.3**	**18.0**	**18.3**	**18.7**	**19.0**	**19.4**	**19.8**	**20.2**	**20.6**
Benchmark	3.7	13.7	13.5	13.6	13.8	13.9	n/a	n/a	n/a	n/a	n/a	n/a
Difference	0.4	0.7	1.9	5.7	4.2	4.4	—	—	—	—	—	—

Analysis shows that nearly half of the corporate costs is related to a management fee paid supposedly for:-

- employee management
- business management
- evaluation of business opportunities
- management of regulatory compliance and relations with regulators
- financial and management accounting, including treasury and tax services
- asset management strategy
- management of information technology

- management and coordination of maintenance and engineering services
- public and investor relations
- legal and company secretarial services
- general administration and company reporting

Many of these functions do not relate to the business of providing a transmission service. Particularly the activities of evaluation of business opportunities, public and investor relations, and legal and company secretarial services cannot be justified. Further, there are already costs provided for IT, finance management, HR and other corporate activities, indicating a double dip for these corporate services.

As noted earlier, the ESCV has taken the initial view that these management fees are not part of the cost to provide regulated services. EUCV members are aware that many businesses owned overseas do have to pay a management fee to their offshore owner, but these fees are usually applied instead of profit repatriation for tax reasons. EUCV is very concerned that PB has not investigated more deeply such a large element of the opex claimed.

The table 7.3 highlights a second issue that PB has not addressed. During the current period corporate costs have under-run benchmark by nearly $3.5m pa. PB has ignored this entirely and accepted the SPA forecast costs in their entirety.

Routine costs are to be more consistent with historical costs but when a deeper analysis is undertaken there are some inconsistencies that appear

Table 7-2 – Routine maintenance costs 2003/04 to 2013/14

Expenditure $m (real 2007/08)	02/03	03/04	04/05	05/06	06/07	07/08*	08/09*	09/10	10/11	11/12	12/13	13/14
Maintenance	4.6	19.7	19.2	17.8	17.4	17.7	18.1	18.4	18.8	19.2	19.6	19.9
System operation	0.9	3.9	3.9	3.5	2.5	2.6	2.7	2.7	2.8	2.9	2.9	3.0
OHS	0.3	1.0	0.9	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Support	1.0	3.1	3.8	6.1	4.7	4.8	4.9	5.1	5.2	5.3	5.4	5.5
Total	6.9	27.6	27.8	28.2	25.2	25.7	26.3	26.8	27.4	27.9	28.5	29.1
Benchmark	9.8	34.6	35.7	35.3	35.7	36.3	n/a	n/a	n/a	n/a	n/a	n/a
Difference	(2.9)	(7.0)	(7.9)	(7.1)	(10.5)	(10.6)	—	—	—	—	—	—

The recurrent costs include for OHS and support activities yet these are also included in the corporate costs (particularly in the management fee).

Summary of PB recommendations

Table 7-38 – PB-recommended controllable opex forecast expenditures

Expenditure $m (real)	08/09	09/10	10/11	11/12	12/13	13/14	Total
Submitted	69.441	71.858	74.123	75.417	76.621	77.831	445.291
Proposed variation	(3.530)	(3.738)	(4.475)	(5.292)	(5.495)	(6.358)	(28.888)
PB recommendation	65.911	68.120	69.647	70.125	71.127	71.473	416.403

PB has assessed that the SPA claim for opex is overstated and recommends an average reduction of ~$5m pa to the SPA claim

This $5m pa comprises

- ~$1m pa for opex reductions from the current year capex, but PB does not compare this amount to the estimated opex savings used to justify the capex. This capex of $416m over five years has resulted in an opex reduction of less than $1m pa. The cost of this capex is >$4m pa so this opex saving hardly provides any financial justification of the capex used (new allowance)
- ~$1m pa for reducing the SPA claim on opex for new investments, as SPA had used an average $opex/RAB for the new investments (1% reduction)
- ~$1m pa for a reduction in the costs for the asset refurbishment program (5% reduction)
- ~$1m pa reduction in the self insurance costs (46% reduction)
- The balance of the savings relate to the reduction in the labour wages escalator used (0.5% reduction)

EUCV considers that PB has not been as diligent as it should have been in assessing the new allowances for opex. It has failed to identify a number of aspects where SPA has loaded its opex claim with costs that do not bear close scrutiny

The EUCV is very dissatisfied with the rigour of the work done many areas (identified above) and requires that the AER must rectify this blatant shortcoming.

5.4 Service standards

The following table was developed by EUCV to demonstrate the service standards that currently apply and those suggested by SPA

	Current Period							Proposed			
	Target	2003	2004	2005	2006	avge	weighting	collar	Target	cap	weighting
Availability Measures	%								%		
Total Circuit Availability	99.2	99.3	99.27	99.34	99.26	99.30	0.1	98.38	98.68	98.8	0.2
Peak Critical Availability	99.9	99.8	99.97	99.95	99.88	99.90	0.075	98.51	99.28	99.7	0.2
Peak Non-critical Availability	99.85	99.8	99.57	99.86	99.79	99.76	0.025	98.87	99.36	99.6	0.05
Intermediate Critical Availability	99.85	99.5	99.8	99.75	99.56	99.65	0.025	97.11	98.49	99.2	0.025
Intermediate Non-critical Availability	99.75	99.3	99.39	98.21	98.77	98.93	0.025	97.25	98.62	99.3	0.025
Loss of Supply Event Index	**No.**								**No.**		
>0.05 min per annum	2	3	2	5	5	3.75	0	7	4	3	0.125
>0.3 min per annum	1	0	0	2	3	1.25	0	4	3	2	0.125
Average Outage Duration	**hour**								**hour**		
Lines	10	9.98	2.73	7.542	33.38	13.41	0.125	12	7	4	0.125
Transformer	10	7.66	4.862	6.644	7.692	6.71	0.125	10	7	6	0.125

Source: Collation by EUCV from SPA application

Using this same format the PB recommendation can be assessed against past performance

	Current Period							PB Proposed			
	Target	2003	2004	2005	2006	avge	weighting	collar	Target	cap	weighting
Availability Measures	%								%		
Total Circuit Availability	99.2	99.3	99.27	99.34	99.26	99.30	0.1	98.41	98.73	99.05	0.2
Peak Critical Availability	99.9	99.8	99.97	99.95	99.88	99.90	0.075	98.76	99.53	99.93	0.2
Peak Non-critical Availability	99.85	99.8	99.57	99.86	99.79	99.76	0.025	98.95	99.53	99.81	0.05
Intermediate Critical Availability	99.85	99.5	99.8	99.75	99.56	99.65	0.025	97.71	99.09	99.78	0.025
Intermediate Non-critical Availability	99.75	99.3	99.39	98.21	98.77	98.93	0.025	97.94	99.10	99.68	0.025
Loss of Supply Event Index	**No.**								**No.**		
>0.05 min per annum	2	3	2	5	5	3.75	0	9	6	3	0.125
>0.3 min per annum	1	0	0	2	3	1.25	0	4	1	0	0.125
Average Outage Duration	**hour**								**hour**		
Lines	10	9.98	2.73	7.542	33.38	13.41	0.125	11.1	6.4	1.6	0.125
Transformer	10	7.66	4.862	6.644	7.692	6.71	0.125	9.3	6.9	4.5	0.125

Source EUCV and PB report

This recommendation has to be assessed in light of the significant expenditure that has been invested so far in the system and the even greater amount that will be invested in the next period. As EUCV noted, SPA had reduced its service standards from those mostly achieved in the current period.

The recommendation from PB would allow SPA to achieve a bonus in every year of the current period based on the past five years of performance. This is not a feasible incentive scheme as the near certainty of achieving a bonus must not be taken as a given but something to be strived for. In some years, SPA would have achieved a near maximum bonus.

SPA asserted that with the major capex program it proposes, there will be periods when the system will be operating under less than ideal circumstances. This observation has legitimacy at times, but it should be noted that consumers are seeking good performance regardless of the constraints being imposed on the TNSP. Further, it should be noted that SPA has achieve the current performance levels despite SPA undertaking concurrent capex works.

EUCV considers that PB has been more influenced by the protestations of SPA than it has by the needs of consumers that require the service. Consumers should not be required to contribute to an incentive program that does not deliver the same performance that they expect from the system, and one that is clearly biased towards a bonus being paid for a lesser performance than they have experienced in the past.

The capex program is one proposed by SPA, and is totally under the control of SPA. Greater amounts of opex and capex have been recommended by PB as part of the total package, yet PB has decided that lesser performance is the outcome.

Again PB has failed to recognise that consumers are paying for increased capex and opex and therefore should not be expected to also pay a bonus for lesser performance.