

Energy Consumers Coalition of Victoria

Australian Energy Regulator

Victorian Electricity Transmission Revenue Reset

SP Ausnet and VENCORP Applications

A response

by

The Energy Users Coalition of Victoria

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Executive Summary

The EUCV welcomes the opportunity for presenting its views on the applications from SP Ausnet (SPA) and VENCorp for a reset of the electricity transmission costs in Victoria. The EUCV apologizes for its submission being a little after the time set by the AER and appreciates being granted extended time to make this submission. A contributing reason for the delay is due to the submission of new material by SPA.

At a high level, the EUCV notes that the costs for providing the electricity transmission system in Victoria are set to **rise significantly** based on the applications of SPA and VENCorp. In nominal terms, VENCorp advises that costs will rise from \$7.7/MWh in the year commencing 2008, to \$11/MWh in the year commencing 2013. This is a rise of over 50% in nominal terms and over 40% in real terms. This is an unacceptable impost of an annual average real increase in price of 8%. This proposed rise in average cost needs to be assessed in light of the cost for transmission services of an average of about \$7/MWh in 2005.

Both SPA and VENCorp are contributing greatly to this significant rise in costs by seeking across the board increases in expenditures. By the end of the term, SPA will have increased its asset base by nearly 30% (see SPA table 11.2.1), and VENCorp by an effective 60%. SPA further exacerbates these costs by seeking an unwarranted increase in opex costs of \$22m pa (real) which equates to about \$0.50/MWh on its own.

The main increase in average costs is because consumption is projected to only marginally change over the period (thereby implicitly increasing per unit costs). Notwithstanding the projected marginal change in consumption, both VENCorp and SPA are seeking a massive capex program, equal to over 50% of the RAB. The ostensible reasons for the large increase in capex is not so much the need for new and additional assets to service customer demand, but that the costs for the provision of these assets have increased considerably. Analysis by EUCV suggests that the claimed costs have (with perhaps the exception of transformers) little justification when assessed against movements in wages and construction materials, as measured independently by the RBA and ABS.

Whilst it is accepted that VENCorp operates on a cost recovery basis and therefore its forecasts of costs will be corrected over time, the costs forecast by SPA do not have this inbuilt adjustment, and therefore any over allowances granted by the AER will add to SPA profitability.

During its analysis, EUCV has identified that SPA has an inbuilt incentive mechanism under the building block approach so that SPA increases its profitability by replacing assets (regardless of whether they are still used and useful) as its profits are all tied to the return on assets (opex is intended only to recover cost and therefore has no profit built in). This highly distortive incentive is compounded by another incentive to replace assets, as asset replacement reduces opex and so provides an underrun on opex which SPA can claim full benefit in the period and argue for a benefit sharing in the next period.

SPA has argued that the WACC should be increased as they consider there is a fundamental error in using published values of Commonwealth bonds which increases the yield on bonds by 20-50 basis points. This is despite the efforts of the AEMC to remove WACC inputs from being debated at each reset and so give greater certainty to TNSPs by means of a forward WACC. It seems that an increase in WACC is considered by SPA to be sufficient justification to re-open the AEMC's final Rules determination on transmission revenue as it pertains to the WACC parameters!

The EUCV has the following issues with the **VENCorp** application:-

- the AER should verify that assets that have been fully depreciated are not used to charge consumers again
- the AER should assess why assets should be depreciated over a lesser period than economic life
- why is capex for the next period being forecast to rise by 90% compared to the actual capex incurred in the current period, notwithstanding a 60% reduction in forecast demand growth
- the AER should investigate the veracity of the claims of higher materials and labour costs, as we consider that the labour costs data that has been provided by SPA might be misleading, whilst the claims on material costs can only be substantiated to some extent
- the AER should investigate claims of substantial increases in transformers, as EUCV members have pointed to the significant offsets presented by a high \$A/\$US exchange rate since 2002, and the availability of competitively priced, high quality Chinese transformer equipment. It is likely that other types of equipment of similar quality are also available from lower cost sources

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- the AER should verify that costs of new projects which provide connection to new generation and for export of power from the Victorian region are allocated appropriately and not just allocated to consumers regardless.

The EUCV draws attention to the following issues with regard to the SPA application:-

- the AER should review all capex incurred prior to the recent AEMC changes to chapter 6A to ensure that it is prudent and efficient
- the request to add a premium to the risk free rate is based on a number of misconceptions and should be denied by the AER
- the AER to address the issue of assets being depreciated ahead of their useful life on SPA's grounds that they are "better", "more up to date" and to be "consistent with other TNSPs".
- the need to furnish a financial model as part of the justification of capital management, replacement and refurbishment
- the AER to closely investigate the benchmarking analyses provided as there is evidence that not all relevant benchmark costs for SPA have been properly included
- the AER to investigate the claims of increased wages and materials costs, including costs of transformers and other similar equipment), as EUCV members have pointed to (in regard to the latter) the mitigating effects of the \$A/\$US exchange rate and to the availability of competitively priced high quality Chinese supplies
- the AER to ensure there is no double-counting of costs arising from the co-operative arrangements between SPA and VENCORP
- there is a direct and inverse relationship between increased capex and reduced opex and that any approval for capex must be accompanied by a proportionate reduction in opex
- the AER needs to obtain details from SPA to support its claims of savings under the opex incentive scheme
- the AER should address the EUCV's concerns arising from its analysis of SPA's actual service performance and new performance targets, and the amount of benefit from achievement, as SPA is not only proposing lower

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performance targets but is seeking higher rewards for achieving those targets.

1. Introduction

1.1 The EUCV

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 welcomes the opportunity to provide comments on the AER's review of the revenue reset for the Victorian electricity transmission system.

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

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

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

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

Each of the businesses represented by EUCV has invested considerable capital in establishing their operations and in order that they can recover the capital costs invested, long-term **sustainability** of energy supplies is required. If sustainable supplies of energy are not available into the future these investments will have little value.

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

The members of EUCV have identified that 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

EUCV recognises that with the recent release of the AEMC Chapter 6A of the Electricity Rules (which is stated as being overtly pro investment by the AEMC and assessed to be biased and unbalanced by consumers), the AER is quite heavily constrained in its ability to exercise an holistic view of the final revenue that is determined as the outcome of this review.

It is noted that the determination of the regulatory asset base is quite closely proscribed, the inputs to the CAPM used to develop the WACC are predetermined, the degree to which AER can determine inclusion of capital expenditure is limited, and the AER must allow the regulated businesses extensive freedom in determining the amount of depreciation to be included in the revenue.

By excluding these elements from detailed independent analysis this revenue reset is limited to a review, on the allowances for capex and opex, the standards of service expected from the review, and the degree to which TNSPs are to have incentives to perform more efficiently.

In principle, these (AEMC) changes result in a reduced scope for the exercise of judgment by the AER and the determination of outcomes from the review based more on a mechanical basis.

There is, however, an element of the AEMC changes to Chapter 6A 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 transmission reset reviews. The EUCV and MEU has had significant involvement in this aspect of the AEMC's pricing methodologies Rules determination and views on this element will be presented later in this submission.

1.3 A summary view of the SPAVC application

Putting aside for the moment the detail of the elements which comprise the applications from SP Ausnet and VENCORP (SPAVC), the outcome of the application is that over the period of the reset, transmission tariffs will rise significantly, from \$7/MWh in 2005 to \$7.7/MWh in 2008, rising to \$11.0/MWh in 2014 in nominal terms¹, a real annual increase of 4-5%, after allowing for inflation.

This is a massive increase, given that the amount of projected electricity actually consumed is to increase only marginally. Even after adjusting for expected inflation, the increases in costs still are excessive.

The ostensible reasons for this increase are stated as being:-

- Increased capital expenditure to manage increases in demand
- Increased costs due to the shortage of skilled labour
- Increased costs due to increased material costs
- Increased capital expenditure to replace many aging assets
- Lack of investment by the previous government controlled entity.
- Increased maintenance costs due to the age of existing assets
- Increased maintenance costs due to labour costs.

Against this avalanche of cost increases there is almost no suggestion that there is any prospect of any reductions in costs including efficiency savings. Competitive industries such as our members are continually driven to reduce the costs of producing their products, yet regulated businesses seem to depart from the competitive norm by adopting what appears to be a 'historic cost plus increase' culture.

¹ See VC application page

Against this background, we consider that the AER has a clear responsibility to ensure a certain amount of discipline is placed on SPA and VENCORP and that all claimed costs can be justified and are economically efficient.

1.4 The helicopter view

The EUCV is unable to accept that the proposed increases in costs can be justified where assessed against a background of only a marginal rise in consumption. Equally, we accept that the applicants have provided arguments in support of each element of their claimed cost increases. In a competitive world, senior management of a business must and do take a view that any claimed increase in cost must be controlled in light of the potential implications for the businesses' competitive position. In the regulated energy sector, however, legislation has provided the AER with the role of providing this discipline, and so it must ensure that the resultant outcomes are in keeping with what can be expected from the discipline of competitive drivers.

At its most fundamental level, an increase in price of nearly 30% real over a 6 year period cannot be sustained by any competitive business.

A consistent complaint raised by TNSPs and their distribution cousins, has been the lack of investment by previous government owners. It is now 10 years or more since the Victorian government exited ownership of the TNSPs and DNSPs. Regulators have already undertaken at least one reset review, effectively granting the TNSPs what was requested in terms of capex, and opex. Performance by TNSPs over the regulated periods since has been acceptable, yet the funds granted at the last review seem now to be insufficient, supposedly warranting a significant increase. The businesses have all continued to be financially viable, yet more revenue is being sought.

1.5 The materiality of transmission costs

It is often alleged (particularly by TNSPs) that of all the costs that consumers incur from the electricity supply chain, transmission charges are the least. Other than losses and NEMMCO costs, this statement has validity. Further, TNSPs point out that transmission costs are effectively hidden from most consumers when they are rolled into distribution network charges. Again this statement has some validity.

Notwithstanding the above, transmission costs can be significant, and the closer a consumer is to the transmission supply point and the larger the demand of the consumer, the more significant transmission costs can become. It is, therefore, essential that transmission costs are not treated as insignificant, and are addressed in a comprehensive manner.

Between them, VENCORP and SP Ausnet intend to expend some \$1,194m of capital over the next 6 years. This is equivalent to \$660 per residence in the Victorian region. Interpreted an alternative way, it would appear that SPA and VC intend to increase the regulatory asset base by nearly 50% over the next 6 years. Regardless of how this is put, the amount of capex is not insignificant.

2. VENCORP and its claims

2.1 Assumptions about VENCORP

VENCORP is a cost recovery entity, established as a corporation under Victorian legislation. As such, it has quasi governmental status and there is an expectation that it will minimise its costs and ensure that expenditure undertaken by it will be prudent and efficient as would befit a government department.

VENCORP is also responsible for providing the Victorian electricity transmission network and to provide planning for, and implementation of, necessary augmentations to improve the ability of the network to carry out its functions.

To perform its functions, it has effectively contracted a significant part of the supply of services to SP Ausnet, and has some more assets provided by other entities. The application from VENCORP has nearly 90% of its expected transmission revenue requirement being based on costs provided to it from SP Ausnet.

Of the VENCORP costs of \$30-\$78m claimed in the reset, direct operational costs are a small part, and assume a labour increase rate of 4.5% pa and other costs at 3% pa from current levels. Notwithstanding this, it is essential that the current costs can be demonstrated to be prudent and efficient.

2.2 Actual augmentations implemented

VENCORP has implemented some \$140.6m of augmentations since the last reset, although it was provided with an approved \$169.7m to implement augmentations. As VENCORP operates strictly on a cost recovery approach, this means that all savings from the lower expenditure is returned to users.

The approach used by VENCORP is that these augmentations will continue to be included in the revenue stream under the terminology of “committed augmentation charges.

VENCORP has an approach that allows for these augmentations to be recovered over a shorter term than the economic life of the asset. This means that at some point, the assets will have returned the full value of depreciation, before the assets themselves are determined to have completed their true economic or physical life.

The implication of this approach has a two fold impact:-

- Firstly that current users are incurring a greater cost than they might otherwise need to by having to pay a depreciation an accelerated charge, which might be as much as twice as high as a depreciation allowance if the assets were depreciated over their normal economic life, and
- secondly, unless VENCorp has specifically agreed within the contract for the provision of these assets to be for operating costs only at the end of the depreciation term, then future users will be levied a cost for using these sunk but still monopoly assets which have already been fully depreciated.

The AER should verify that there can be no instance at all where the assets having been fully depreciated over a shorter period than the economic life, can ever be charged for by the owners at any more than the operating costs to maintain the assets in full operational order. This is to avoid charging customers twice for the capital costs of the assets.

The AER should also then identify why, and if appropriate to correct, the inequity of current users being charged for using assets at a higher rate than necessary, and providing future users with an unearned benefit.

The EUCV is of the view that depreciating assets over a lesser period than the full economic life is an unnecessary burden on current users.

2.3 New augmentations

As VENCorp is a statutory body operating as a cost recovery entity, it has no incentive to 'over' or 'under' estimate future costs or augmentations. Already VENCorp has demonstrated that it will only carry out augmentations as and when they are required. It has shown in the current period that it will defer a planned augmentation included in the permitted capex, and insert another augmentation which was not planned but was seen as more necessary.

It is noted that VENCorp is permitted to only include costs that are actually incurred and only for projects that are identified as needed. However, consumers will be required to fund the allowance permitted by the AER, although at times through the period, VENCorp will be expected to reduce the tariffs to reflect any lesser expenditure.

VENCorp has provided a listing of potential augmentations to be carried out over the next 6 year regulatory period. They fall into three categories:-

	Total of all	Included
1. Demand driven	\$227m	\$227m

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2. Generation driven	\$245m	\$125m
3. Export driven	<u>\$166m</u>	<u>NIL</u>
4. Total	\$524m	\$354m

VENCorp has forecast these amounts based on an increase in demand (the main driver for augmentation) of an average of 1.7% based on the 10% POE Summer, and a consumption growth of 0.4% pa. These growth forecasts are significantly down from 2002 forecasts.

In 2002, the VENCORP medium range forecast was an increase in 2.8% pa (10% POE summer) for demand and 1.8% pa growth in consumption. Demand was expected to reach 10,500 MW in summer 2007 with a consumption of 52,835 GWh for 2007 VENCORP has provided the following chart in its application.

The summer and winter MD forecasts are displayed in Figure 7.2 below.

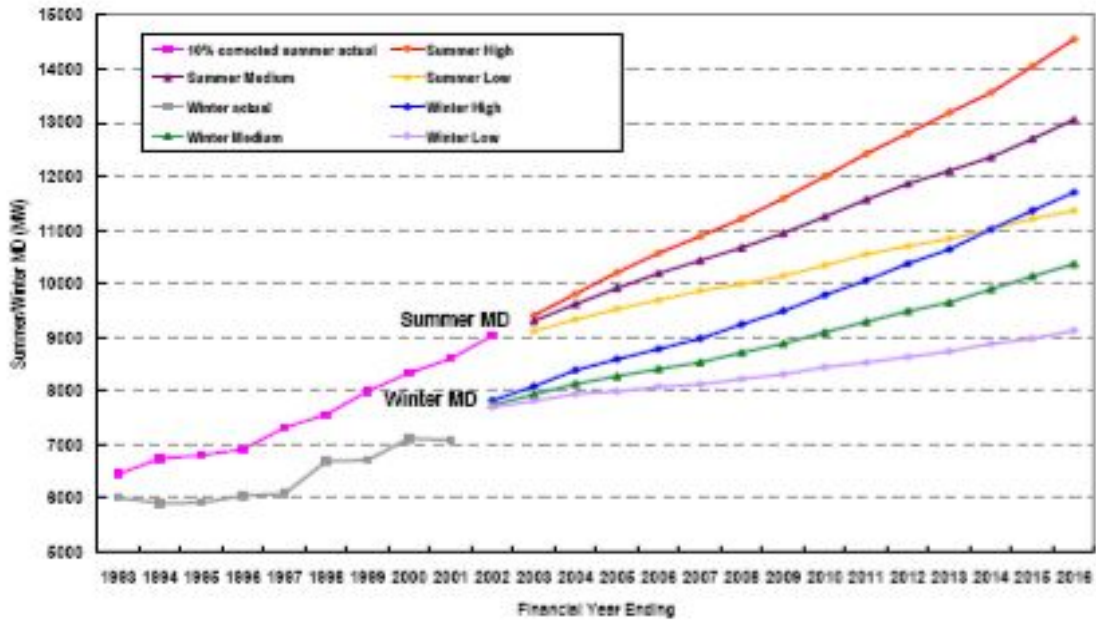


Figure 7.2 Forecast Summer and Winter MDs

Consumption has been forecast in the following VENCORP chart.

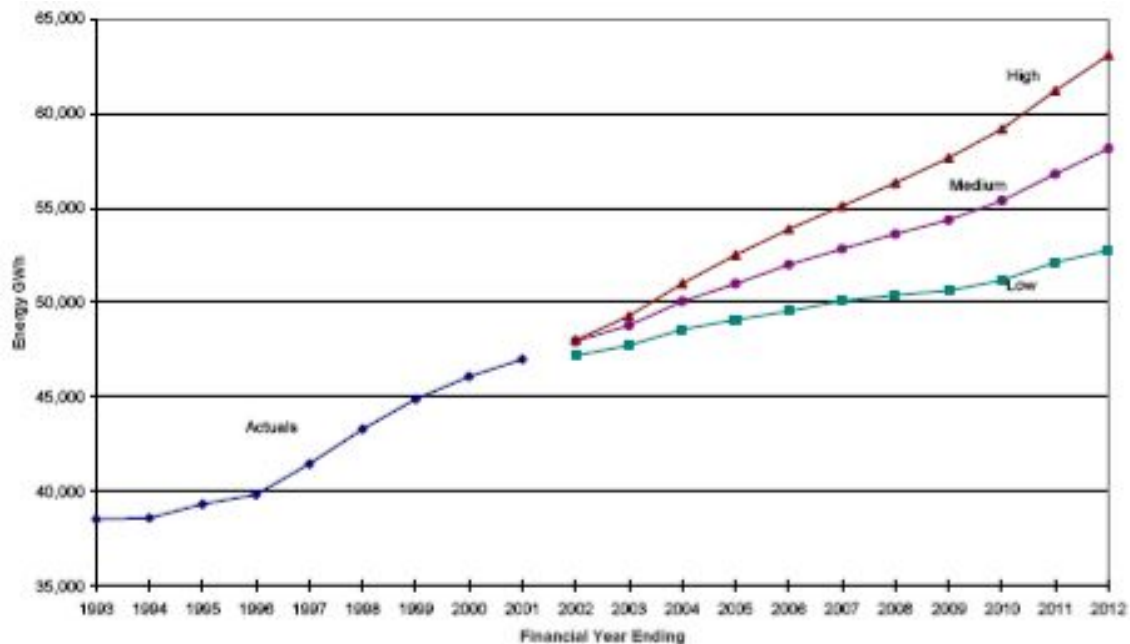


Figure 7.1 Victorian Energy forecasts

Based on these inputs and charts, VENCORP has forecast a requirement for capex of \$169.7m (\$2007) for new augmentations².

The actual peak demand reached was 8886 MW in 2007, with an annual peak consumption of 50600 GWh. To manage these increases VENCORP used \$140.6m (\$2007) of actual capex³.

VENCORP has determined that the total cost of the new augmentations over the 6 year period will be some \$354m (\$2007). This is more than twice the capex incurred for augmentations in the current period. VENCORP considers that this increase is partly due to the longer regulatory period and to increased costs expected as a result of increases in global and local labour and materials costs as is stated on page 30 of the VENCORP application.

“This increase in augmentation requirements for the forthcoming regulatory period compared with the previous regulatory period is driven by the increase in the length of the regulatory period from five years to six

² VENCORP submission to ACCC, Electricity revenue cap application for the period 1 January 2003 to 30 June 2008, 30 April 2002

³ Figure 6.1 VENCORP application

years and the increasing cost of network augmentations driven by the global increase in the cost of network assets.”

Adjusting for the impact of the additional half year⁴ of the period, VENCORP would appear to be forecasting an **increase of 90% in capex for the next period against the capex it incurred for the current period, despite a 60% reduction in forecast demand growth. This apparent inconsistency needs to be more clearly substantiated!**

If the forecast is accurate, there would be an expectation of lower capex as demand and consumption will be much lower. Not only is the expected growth in demand to be nearly half what it was in the current period, but forecast consumption is almost a quarter of the 2002 expected growth.

This proposed increase is therefore considered to be excessive as it appears to be very counter intuitive. Because of this, the AER is requested to seek a clear explanation as to what the increase is expected to be arising from labour and material cost increases. This will allow a clearer picture of why, and what is, the cause for the massive increase in capex requirements for augmentations.

VENCORP observes that the cost of materials and labour have grown at rates much greater than CPI. The EUCV contests this and points to our assessment of inflation and cost increases arising from labour and materials provided in sections 7.1 and 7.2 of this submission.

2.4 Observations about what capex should be levied against consumers

The VENCORP approach provides a separate approach to address augmentations to the transmission network which is independent of any commercial drivers to seek growth for the sake of growth, as might apply to other TNSPs which provide their own indications of growth and which are driven to increase returns to their shareholders.

In light of the recent AEMC decision on the pricing Rules to require the AER to address the issues of cost allocations more closely, the EUCV notes that a number of the proposed projects requiring augmentation are related to connection of new generation and augmentation of networks to allow greater access of generation to the shared network. There are also a

⁴ The 2002 application from VENCORP was for the period 1 January 2003 to 30 June 2008, a period of 5.5 years

number of contingent projects identified which might increase the amount of export of power from the Victorian region.

The EUCV notes that the only projects that should be included for Victorian consumers to pay for, are those directly related to demand projects.

Projects which provide connection to new generation must be paid for by the generators being connected, and not made part of the costs to be recovered from consumers.

Additionally it is noted that a number of projects proposed are augmentations to the shared network which will be primarily to prevent congestion caused by too many generators attempting to access the shared network at a common location. The AEMC (in its recent revenue and pricing Rules determination) was quite definite that generators were not expected to pay for deep connection costs, but as a counter to concerns that there were no locational signals for generation, the AEMC further considered that a generator was responsible for any augmentations that were a result of congestion caused by generators, and that this would provide incentive for generators to locate where congestion would not impact on the ability of generators to dispatch into the shared network.

The EUCV therefore points out that a number of the projects proposed by VENCORP are to allow greater access of generation to the shared network. The AER must provide clear direction to VENCORP that in cost allocations, these augmentations should not be included in costs paid for by consumers.

In a similar vein, it is noted that the contingent projects are all related to increasing export from the Victorian region and therefore do not benefit consumers in the Victorian region. In fact, augmentation to provide greater export of power has the potential to be a double impost on consumers in the Victorian region.

1. Historically the costs of all augmentations to the Victorian network (except for generator connections) have been passed to Victorian consumers and included in the tariffs for revenue recovery.
2. If there is greater access to other regions by Victorian generators, there is an expectation that the prices Victorian generators will charge for power will increase, causing a further impost on Victorian consumers.

If these consumers get no benefit from the augmentation (and/or are exposed to potentially greater costs for their power), then they must not be levied on the costs of its provision.

3. SPA Regulated asset base

The key elements of setting the future RAB and its development from the starting RAB and its roll forward are:-

- Starting RAB
- Capex included from the starting RAB
- Depreciation approved for inclusion
- Inflation adjustment (based on actual amounts)

Each element is discussed below.

3.1 Starting RAB

This has been set by the AEMC and fixed in Chapter 6A schedule 6A.2 at

“SP AusNet \$1,835.60m (as at 1 January 2003)”

3.2 Capex included in RAB

In its final decision⁵ at the SP PowerNet reset review, on page 63, the ACCC stated:-

Proposed capex efficiency carry-over for 2008 onwards

As per its Information Requirements Guidelines, the Commission will monitor SPI PowerNet’s annual capex and will undertake a full assessment of its actual capex at the next regulatory reset. Where underspending has occurred, the Commission will consider claims of efficiency gains in determining any appropriate adjustment.

Scope for future efficiency gains

The Commission notes that a range of factors may affect the actual capex costs experienced during the regulatory period, including the progressive implementation of Indec Consulting’s recommendations, unforeseen technological change and exchange rate fluctuations on imported equipment. It would therefore expect further efficiency gains to be made in capex over the period.”

⁵ ACCC Final Decision Victorian Transmission Network Revenue Caps 2003-2008, 11 December 2002

The implications of these statements are that the ACCC would undertake a review of the actual capex of SPA and assess the legitimacy of it for the purposes of efficiency carryover. As a corollary, the implication is that the ACCC intended to assess the actual capex to ensure that it was reasonable.

The EUCV notes that the AEMC has stated in its Chapter 6A determination that in future capex will be assessed on an ex ante basis and that the actual capex incurred is to be incorporated into the RAB on an as incurred basis. The MEU had commented to the AEMC that this approach was flawed, particularly when the capex is assessed on a probabilistic approach. The AEMC has elected to ignore this concern at this time.

Notwithstanding the AEMC decision, the AER still has an obligation to ensure that capex incurred prior to the change in Chapter 6A is both prudent and efficient. Therefore, the EUCV expects that the AER will undertake a review of all capex incurred prior to the AEMC determination to ensure that it meets the requirements for roll into the RAB.

The SPA application implies that it expects that the AEMC decision permits the roll in of actual capex without the review implied by the ACCC final decision. The EUCV is of the view that chapter 6A does not permit this to occur, but requires an assessment of the capex on an ex post basis.

Chapter 6A does require that in future the AER will carryout a detailed review of claimed capex so that approval of future capex can be granted on an ex ante basis. Where a detailed ex ante review did not occur (such as for the 2002 review of SPA) then the ex post review must be carried out as otherwise there would have been no detailed review of each project implemented by SPA for prudence and efficiency.

3.3 Depreciation and inflation

SPA advises that its depreciation schedule is as incorporated in the final decision of the ACCC in 2002, and that it has used actual inflation to develop the roll forward. The EUCV accepts that this is an acceptable approach.

However the EUCV does require that after the approved capex is included, the AER should carry out its own calculations to ensure the starting RAB is correct

4. SPA WACC

4.1 The AEMC revision to Chapter 6A

The rewrite by the AEMC of the transmission element of the Rules as pertaining to the WACC, was explained by the AEMC along the lines that by fixing the elements of the CAPM formula, there would be more certainty for TNSPs, so that they could develop a longer term view as to what they would be granted in the way of return on assets.

It would appear that the only certainty the AEMC provided the TNSPs was an ability to raise the level of returns, and to exclude any ability of the regulator to bring some sense into the returns awarded to regulated businesses.

The investment market has already demonstrated its view of the burgeoning returns granted to regulated utilities and a monograph on how the market saw the AEMC decision is attached as appendix A.

However, the AEMC determination has not satisfied the TNSPs. They now want even more! Not content with a more generous treatment than the ACCC had granted them in the past, despite the increasing trends of jurisdictional regulators to discount the debt premiums and equity beta, they have now sought other avenues from which to increase their rewards for providing a monopoly service.

SP Ausnet (and a number of other regulated businesses) have provided the AER and other regulators with an argument prepared by NERA purporting to explain that recent trends in the market for government issued securities (which set the risk free rate – RFR) show there might be an understatement of the **true** value of the bonds, particularly in reference to the nominal bond value compared to the indexed bond value.

The EUCV sees this as an attempt to further inflate a WACC which is already excessive when based on the AEMC decision in Chapter 6A of the Rules, compared to the inputs used by jurisdictional regulators.

4.2 Assessment of RFR in terms of MRP and other indicators

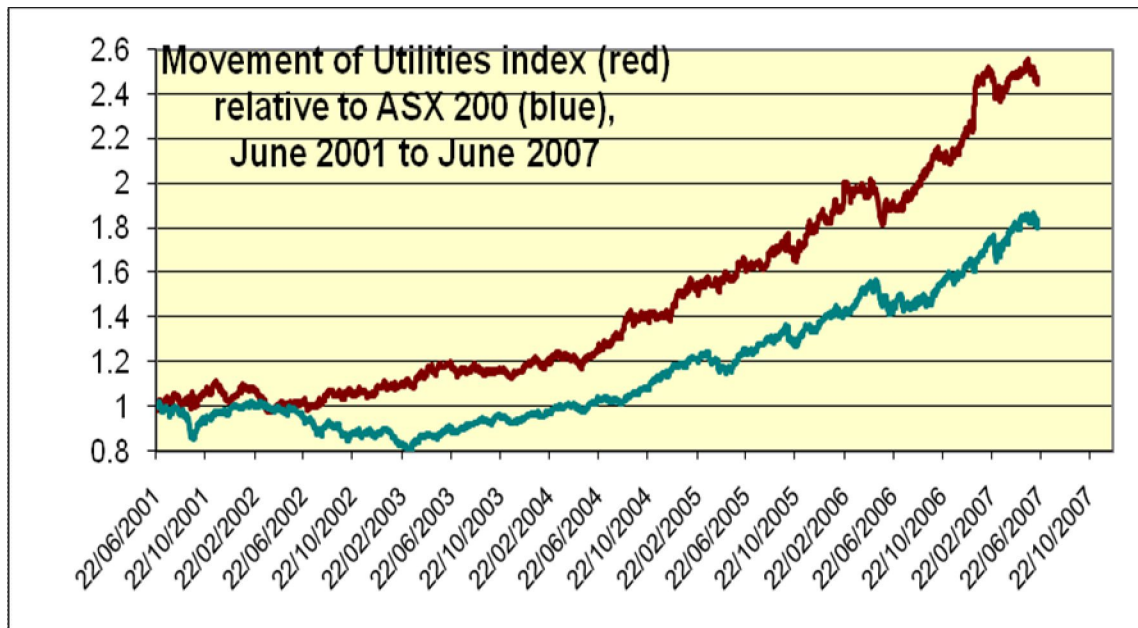
It is interesting but expected that regulated businesses will only provide information where there might be distortions in the market which have the potential to provide higher rewards. We no longer see the regulated businesses point to the “Tech boom” which supposedly distorted the market and supposedly provided an under valued equity beta. Since the end of the “Tech boom” there has been little movement in the equity beta for Utilities, despite the “Tech boom”

losing all its impact in 2001. There was no protest when this was over, and it was demonstrated that much of the so-called “Tech boom” impact was seen as having little impact on the Utilities’ equity beta.

Unfortunately, the AEMC has, in its “wisdom” determined that equity beta will be 1.0 until the AER carries out its review on CAPM inputs next year. The chart in appendix A includes a running review of asset beta and dividend yield for the past 18 months for Australian shares.

Since that chart was developed, as at 18 June 2007, CommSec shows that the “All Ords” asset beta has moved from 1.02 in late January 2007 to 1.05 in mid June, with the “All Ords” dividend yield moving from 3% to 3.4%, an increase of 13%. At the same time the Utilities sector asset beta has remained static at 0.37, but the dividend yield has moved from 4.1 to 5.8, an increase of 41%!

Further, as shown in the following graph, the Utilities sector has consistently outperformed the benchmark (ASX 200) by an average of over 40%!



Source: Data from CommSec

The basic assumption of CAPM is that the long term average of the market as a whole is that the equity beta is 1.0 (by definition) and the MRP is 6%⁶. MRP is the benefit that an investor will achieve from dividends plus share growth above the

⁶ This value of 6% has been addressed by a number of independent studies and the recent 30 year average is much less than this as calculated by RR Officer and others.

risk free rate. This means that if MRP is 6%, and dividend yields are 3%, the share value growth is 3% plus the RFR, creating an overall growth of 6% above the RFR.

The consistently higher dividend yield of Utilities above that of the market average, plus the consistent out performance of the share value of Utilities compared to the market average, clearly shows that there is a significant disconnect between the WACC awarded by regulators and the earnings from investing in shares based on the market average.

There is no basis at all for increasing the risk free rate to accommodate a supposed under-recovery in regulated WACC using the AEMC stipulated CAPM inputs.

4.3 Assessment of RFR in relation to the market

The value of government bond rates is set by the open market after valuing a wide range of inputs and discretion of potential purchasers and buyers of these securities. From the market value assessed for purchasing specific bonds of a fixed face value, a yield is determined. This yield is the bond rate.

The NERA papers imply that the market is incorrect in the way bonds are valued, and that this error has the impact of increasing the yield for those bond, or alternatively over stating the purchase price of the bonds when being traded. If an open market sets the purchase price for a bond, then this is the value the market has set, not a different value.

There will always be reasons for increases and decreases in values of securities – some well founded and others entirely speculative. These reasons will have varying degrees of volatility and therefore will impact on the outcomes. At the behest of TNSPs and others NERA has developed a theory that bonds are currently over priced and that therefore the resultant yields are understated, warranting an increase in the stated yield to an apparent yield.

Investment managers have consistently developed theories as to why their particular approach did not work as intended. For example, equity betas in the late 1990s were supposedly depressed as a result of the “Tech boom”. Subsequent monitoring since has demonstrated that this outcome was limited in impact, if there was one at all. **As a result investments are assessed over the long term rather than just addressing transient anomalies in the market.**

It should be noted that if long term averages are measured against short term movements then there will always be periods when the market is understating the long term average. The corollary of this observation is that there must be

times when the reverse occurs, when the market overstates the long term average.

If NERA is correct in that bond values are currently being over stated, then there will be a time when the market will be undervaluing them, so that in the long term these movements will be averaged out. Alternatively the market for trading bonds is wrong, and many bond traders are consequently equally wrong.

As an example of these transient anomalies, the EUCV points to the valuing of market risk premium. The long term average of MRP has been assessed as 6% although it is accepted that MRP has been both lower than this and also higher. The AER has to decide whether it will introduce short term adjustments to the bond rates, or continue with current practices.

This point is significant as MRP is essentially the difference between the share market accumulation index change and the corresponding yield on government bonds. If the bond yield is incorrect and should be higher then it equally implies that the MRP is too high and should be reduced. As the long term MRP has been set using government bonds as published, then to change from this approach introduces the need to assess the value of bonds used for all historical analysis.

If the current assessment of bonds is a short term issue, then this has to be assessed in terms of the MRP being overstated at times as well.

4.4 Assessment of RFR in relation to the AEMC decision

The AEMC made its decision on CAPM inputs based on the previous practice of the ACCC using the Commonwealth government 10 year bond rates as published, to set the “risk free rate”. The clear import of this decision is that all elements of the CAPM would remain static, with the exception of the risk free rate, which does move with market pressures.

The stated concept behind the AEMC decision was that there would be no debate as to which part of CAPM was open to debate. The AEMC stated quite clearly that it wanted to set all parameters so that the TNSPs would have a degree of consistency in the development of the WACC. On page 82 of its Final Determination for Transmission revenue, the AEMC stated:-

“...the Commission believes that the cost and uncertainty associated with continually reopening both the methodology and parameters at each revenue cap review is unwarranted in terms of any potential benefits and the administrative costs.

Providing short term stability regarding the WACC determination reduces an important source of potential variability in regulatory decision making thereby providing a more certain and predictable environment for investment and financing decision making.”

It is quite obvious from the decision of the AEMC on its approach to WACC, that it wanted there to be no ability of regulatory “adjustments” to be permitted – that all of the application of the CAPM was to be effectively mechanical and to allow no discretion to the regulator, so that TNSPs had a very clear understanding of what would occur in the development of the WACC. As there was no discussion (other than about the period of time over which the RFR would be averaged) the AEMC was of the view that determining the RFR was a matter of incorporating bond rates as published.

There is no certainty as to what adjustment to the risk free rate should be – NERA offers that the adjustment might lie between 20 to 50 basis points. Thus the AER is being expected to make an assessment (exercise discretion) as to what a premium might be. This is the very antithesis of what the AEMC approach was intended – to prevent the regulator from being able to vary the inputs to CAPM from application to application. The AEMC wanted there to be certainty for the TNSPs, and this matter detracts from the certainty that was at the root of the AEMC decision.

What the TNSPs are now seeking is for the AER to exercise discretion as to the extent there might be a mis-match in the value of the bond rates, and to add a premium which is not clearly determined. This unjustifiably transfers additional risks and costs to consumers.

4.5 Conclusions

There is no basis for the TNSPs to get an even larger WACC than is intended by the Chapter 6A Rules, based on the published government bonds setting the risk free rate. The EUCV is of the view that the request to add in a premium to the risk free rate is based on a number of misconceptions.

- 1. The rewards granted Utilities already exceed the rewards earned in a competitive environment as indicated by the out performance of the Utilities index (where most regulated businesses are included) against the market average as indicated by the ASX 200 index**
- 2. The assumption is that the market for trading government bonds is not working correctly and that the traders dealing in these securities are incorrect in the prices they agree for trades which are the basis for bond yields. Care should be taken in making short term**

adjustments when it is the average that has been used consistently for the basis of all inputs into the CAPM and the development of the CAPM inputs.

- 3. The AEMC desired to provide certainty in the WACC development for the security of TNSPs. By opening up the way the risk free rate is developed it creates uncertainty in all other inputs. It requires the AER to exercise judgment which the AEMC wished to avoid in the interests of TNSP certainty.**

5. SPA Depreciation

5.1 Early retirement of assets

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

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

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

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

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

Thus EUCV has a deep concern that assets still used and useful will be taken from service by TNSPs as the TNSPs no longer get any return for them, and replaced with new assets on which they do get a return.

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

5.2 Reducing asset lives

SPA has advised that it intends to reduce the regulated asset life of some assets, in theory in order to be consistent with other TNSPs.

The asset lives of communications and “secondary” assets have been reduced from 25 to 15 years because analog equipment is being phased out, digital equipment is replaced with “better” and “more up to date” options, and elements of the SCADA systems and RTU have shorter lives, again due to the ability to get “more up to date”.

It is concerning to us that SPA is being guided by others, rather than making their own assessments of the useful life of their own assets. It is equally concerning that there is an attitude that “old which still performs the needed functions” must be replaced with “new” because there is “new” available.

The AER must address the issue that assets are being depreciated faster just because a newer asset might be available. The EUCV is of the view that an asset which performs the needed function must not be replaced just because there are newer assets available.

5.3 When should assets be replaced?

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

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

such asset management must include for a financial tool to address the commercial need for asset replacement.

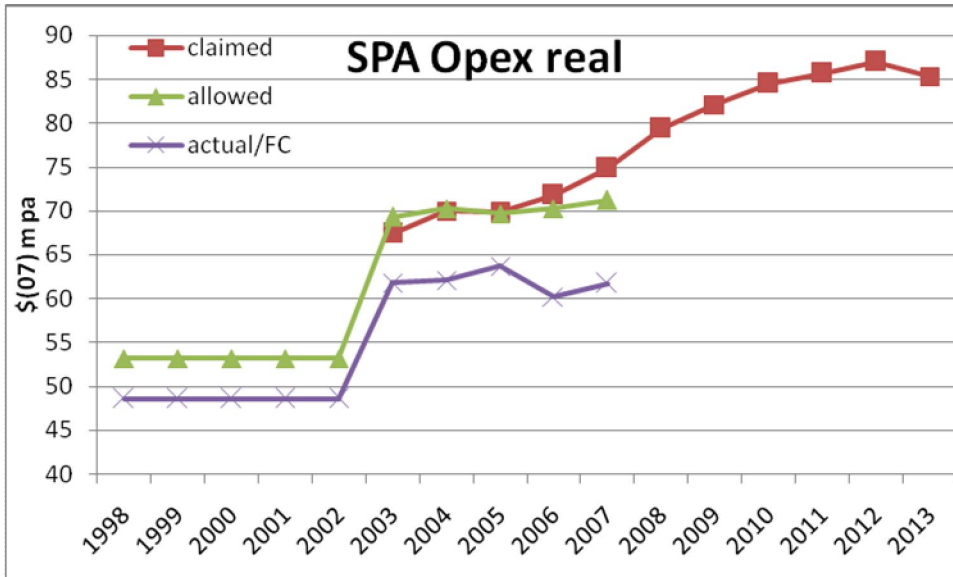
The AER should require SPA to incorporate a financial tool into its asset management program to identify when it is commercially sensible to replace an asset, rather than use physical asset management alone.

6. SPA Opex

6.1 Opex historic, allowed and claimed

The following chart has been developed from data in SP PowerNet's application 2002, the ACCC final decision on SP PowerNet 2002 and the SPA application 2007. Data for 1998 to 2002 used total amounts for the period, averaged for the period. Forecast opex claims from SPA averaged \$84m pa for the next six years. Current opex averages \$62m pa.

SPA claimed opex averages an increase of \$22m (real) pa for the next six years over the current level of opex which would appear to be sustainable in the absence of proven step changes in costs - \$22m pa, or some \$0.50/MWh.



Source: Derived by EUCV from data provided by SPA, ACCC and VENCORP

As noted in section 5.1 above, under the building block approach opex is provided at cost. The only ways a TNSP can make a profit on its opex is:-

1. to game the regulator and so have an allowance greater than that actually needed,
2. for the TNSP to actively seek savings in opex, hold the benefits during the period and share the underrun in the next period, and/or

3. seek to increase capex to replace assets requiring extensive maintenance costs⁷, and so reduce opex.

Of these options, 1 and 3 should not permit the TNSP to have any future sharing of the under runs.

SPA provides quite extensive benchmarking of current opex in its application in section 3.6.2. The clear import of this opex it is seen by SPA that it is reasonably efficient but EUCV would add that based on this information, SPA is by no means the most efficient. This general observation, however, loses credibility when it is recognised that the benchmark costs for SPA are understated compared to its comparators, as the costs **exclude the opex included in the works directly carried out by VENCORP!**

The import of the current opex is that this provides a very clear benchmark for opex for the Victorian transmission system.

The EUCV is of the view that as SPA does not include any augmentation works in its asset base, the current opex is the best indicator of what the opex for the SPA assets should be.

This approach was taken by the ESCoV in its reset review of the electricity distribution networks. By and large the historical levels were used as the basis for setting opex into the future.

The EUCV see no reason at all not to take this proven approach, although it is accepted that there might be some step changes which occurred during the current period that might lead to supporting an increase or decrease in opex incurred.

However as the current opex reflects a high degree of stability over the period, there would appear to be no major step change in the current period that requires an adjustment in the opex for the next period.

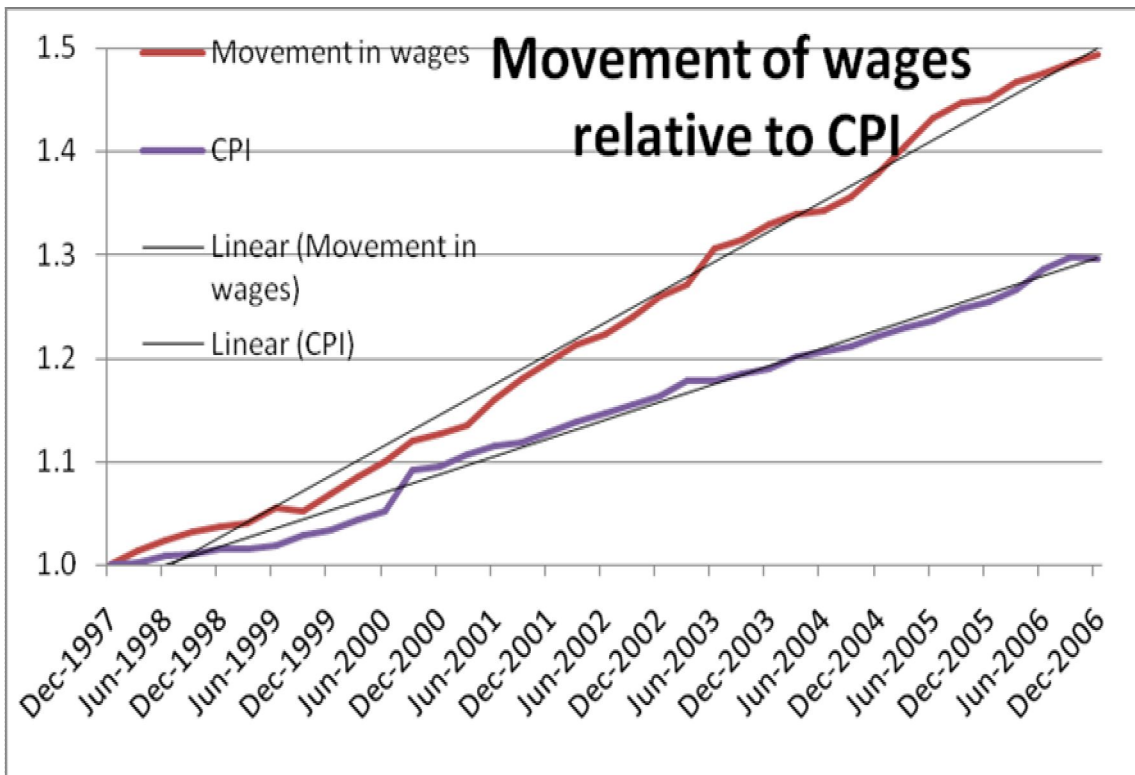
6.2 Movement of wages

In its application SPA refers extensively to the likely increase in wages over the next period. It provides its own assessments as well as those of some

⁷ In this regard it should be noted that there is an incentive for TNSPs to reduce its opex (and so earn an incentive) and to increase capex as it is capex which provides the profits to the business.

consultants. The consultants opine that wages are likely to increase faster than CPI over the next period.

The EUCV has also carried out assessments on wages growth and concurs that wages are likely to continue to outperform the CPI. However, as is noted in section 7.1 below, this observation is not just about to start, but as the following chart shows (using data from the RBA statistics tables G2 and G6) that this outperformance is not new and has been in train since before the last reset in 2002.



Source: Derived by EUCV from RBA statistics

As can be seen, the trend of wages out performing CPI has been in train for a decade. Therefore, the observations made by SPA and its consultants are not new and have been known by SPA since before the last reset.

6.3 Steps changes in opex to be identified

The members of EUCV are also employers in the Victorian market. They are aware that changes in the environment do occur and that these can impact on the costs incurred by employing staff and so on opex.

As a result EUCV is of the view that the current level of opex of \$62m pa (real) should be used as the benchmark for future opex. The consistency of this amount over the past five years must be seen as a sound indicator of an appropriate projected opex level for SPA.

Once accepted, SPA must identify and cost only the step changes that have occurred since 2002 and provide these to the AER. The fact that the opex has been maintained at a consistent level indicates that any step changes that have occurred have been accommodated within this base amount. This approach is consistent with the approach used by ESCoV in establishing the opex allowance for the Victorian distribution businesses.

It must be noted that a step change based on wage movements is unlikely to have occurred, as the wages trend for the past decade have maintained consistency with CPI movements, and this trend is noted and confirmed by the SPA consultants. The import of this is that SPA should not be entitled to any step change based on wage movements.

6.3 External benchmarking

SPA provides some basic benchmarking of its activities compared to those of other similar entities. It is worth noting that just as SPA alleges its assets are of significant age, so do Transend, ElectraNet and TransGrid, who have all at times advised the regulator that theirs is the oldest network in the NEM.

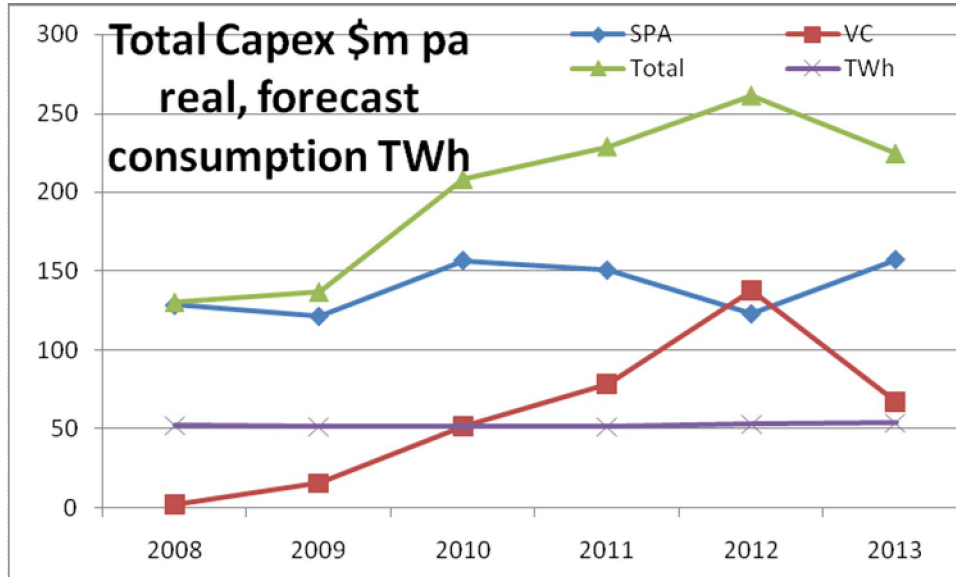
However, the cost benchmarking carried out by SPA uses incomplete cost input. Whereas all of the comparator TNSPs include costs for augmentation, SPA excludes the costs incurred by VENC Corp in providing this essential element included by all the others. The AER should require SPA to provide a costing based on its and VENC Corp's costs in order to provide a better comparison.

In particular, the various charts provided by SPA in its application in section 3.6 (Benchmarking) of the historic SPA opex, exclude the opex incorporated in the VENC Corp contracts for augmenting the system. Notwithstanding this understatement, it is also necessary to point out that SPA's siting on these charts will change significantly by the inclusion of the proposed increase in opex claimed by SPA in its application.

Examining historical cost performance when proposals are made for major increases adds little value to an assessment for a reset.

7. SPA Capex

Capex in the Victorian system is summarized as follows, using data from both SPA and VENCORP applications. The expected change in consumption is also shown



Source: Derived by EUCV

This amount of capex is massive in relation to projected consumption and the size of the network.

VENCORP and SPA have both commented that the reasons for such large amounts are related to material cost and labour cost increases. Additionally, SPA points out that its network is old and needs replacing. These issues are examined below.

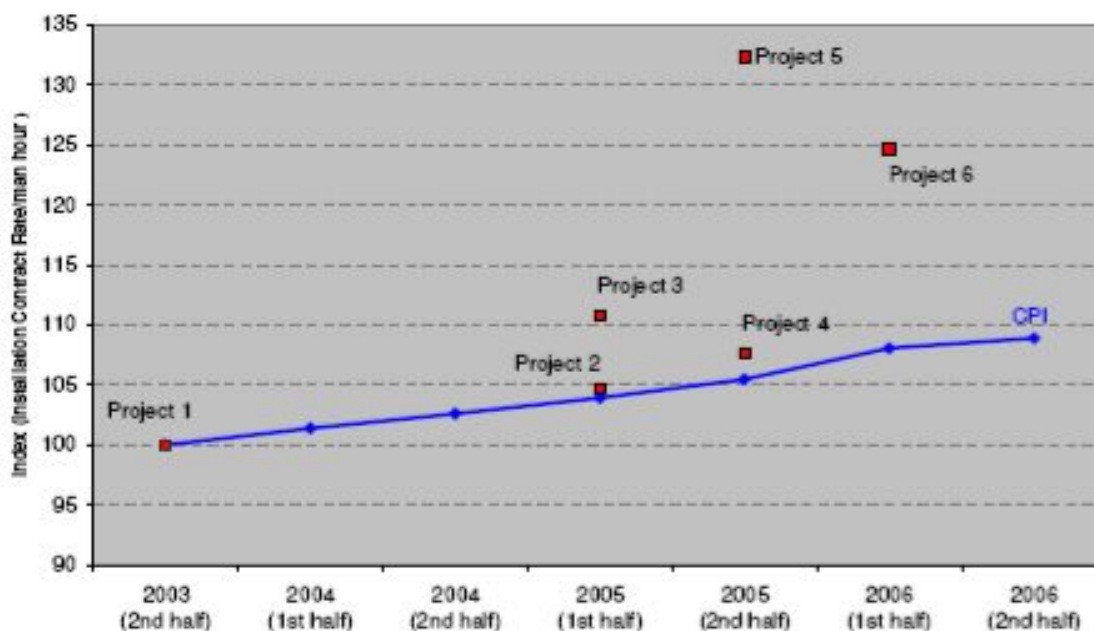
7.1 Inflation expectation - labour

Over the past decade labour rates have risen by an average of 5.3% pa⁸. Since 2002 when the last reset was performed wages have risen by 5.0%. The implication of this data is that wages of late have risen by less than earlier in the decade. It is of concern that SPA implies that wages will massively increase above this historical rate regime, as the same pressures have been present for 2005 and 2006, yet the actual wages have not risen excessively.

⁸ RBA G6

SPA provides data in its application (Fig 5.4.2) that indicates there has been a significant increase in manhour rates in year 2006, by reference to two projects.

Figure 5.4.2: Increases in Contractor Rate for Major Construction Projects



From the EUCV's perspective, the use of a limited number of examples can provide a distorted view of reality.

For those experienced in construction work⁹, it is well known that

- the type of project,
- its location,
- the time of year,
- the extent of demarcation enforced, and
- the degree of exposure to the elements

are but five basic matters which are incorporated into the development of a manhour rate in addition to the basic cost of labour. As ex SECV managers know, for example, the cost to employ labour in the Latrobe Valley has consistently been higher than elsewhere in the State for the same type of work for these reasons.

⁹ The EUCV has access to experienced construction engineers and those experienced in construction costing

ABS statistics indicate that despite the CPI generally staying within the 2-3% band width set by the Reserve Bank, labour costs have tended to increase at a greater rate than CPI. The cost of average weekly earnings over the past three years has run at 4.3% pa¹⁰, compared to the CPI which has run at 2.5% pa¹¹. Thus comparing a project manhour rate against CPI is incorrect and when shown against the average growth in labour costs, would show that projects 3, 4 and 5 all sit on or below the cost growth line.

From a statistical point of view, selection of the base point (project 1) also has a major impact on such data analysis. Using a low start base can provide a very misleading indication of reality.

Thus the data provided by SPA might well be grossly misleading and is dependent on many factors other than a base cost/manhour. The AER should examine this information much more closely, and in preference to using data provided by SPA, it should use data independently developed such as that from the ABS or the RBA.

7.2 Inflation expectation - materials

SPA provides data in its application (Fig 5.4.1) that indicates there has been a significant increase in the cost of materials used in construction of its facilities. The base date used for this chart is 2001.

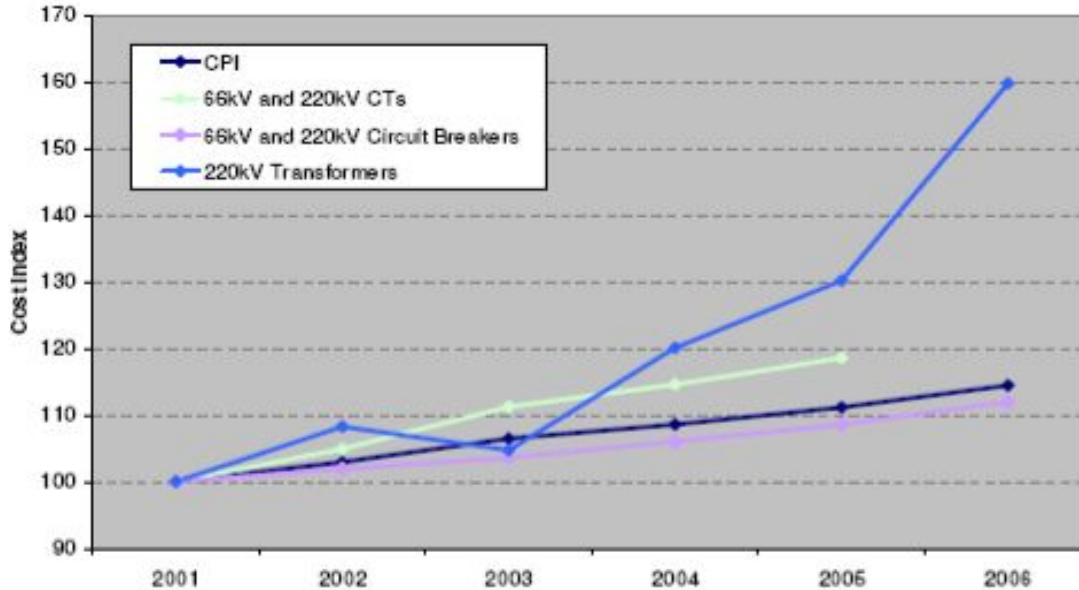
The increase in CPI over this period has been 14.5% or 2.9% pa¹². Thus materials purchased in 2001 for \$100 would now be expected to cost \$114.5 in 2006. The SPA chart shows that circuit breakers have marginally fallen in cost over the previous five years, and CTs have marginally increased in cost. The chart shows that only transformers have grown in price excessively.

¹⁰ RBA table G6

¹¹ RBA table G2

¹² RBA table G2

Figure 5.4.1 Cost Increases for Key Equipment



Reference to the RBA statistical table G3 shows that construction material output prices have risen by 28.9% (5.8% pa) over the same period used in the SPA chart. These prices show that materials such as concrete, steel and wiring have grown faster than CPI by about 3% pa.

However in counterpoint to these rises, it must also be noted that the Australian currency has risen significantly against most other currencies since the last reset. The following table is based on RBA data.

\$A buys	USD	TWI	EUR	JPY	GBP
average of first six months of 2002	0.5347	51.8740	0.5954	69.2730	0.3701
average of first six months of 2007	0.8064	65.9199	0.6067	96.6713	0.4095
% increase in \$A	51%	27%	2%	40%	11%

Source: Derived by EUCV from RBA data

The table indicates that the buying power of Australian businesses for overseas goods has increased dramatically since the last reset. Input from EUCV and MEU members provides an observation that as their products have become less internationally competitive with the rising \$A, so have imports used by SPA and other regulated businesses reduced in price when purchased.

There is a view that the \$A will remain high (or even rise further) as a result of relatively higher interest rates in Australia. When the impact of this is compounded with the expected continuing high exports of resources (for which when there is high demand, has historically driven the \$A higher) there is an expectation that the current levels of the \$A will remain or even increase. Thus there is an expectation that for a considerable share (if not all) of the next reset period there will be a continuing high purchasing power of the \$A.

SPA has provided information advising that the costs of equipment generally have remained within the bounds of CPI, except for the supply of transformers. EUCV members have advised that the supply of transformers from China have the same high quality as those from the USA, UK and Europe but at a considerably lower cost.

Thus there may be some validity in SPA claims that materials costs have risen, but certainly not by the amounts claimed. Except for transformers, permitting increases of about CPI would on average more than compensate for all materials used by SPA when considering the impact of the rising \$A and the data provided.

As pointed out above, the data provided by SPA might well be somewhat misleading and is dependent on assessing the many inputs that go into the materials mix used by SPA.

The AER should examine this information much more closely, and in preference to using data provided by SPA, it should use data independently developed such as that from the ABS, the RBA or from a range of supplier sources.

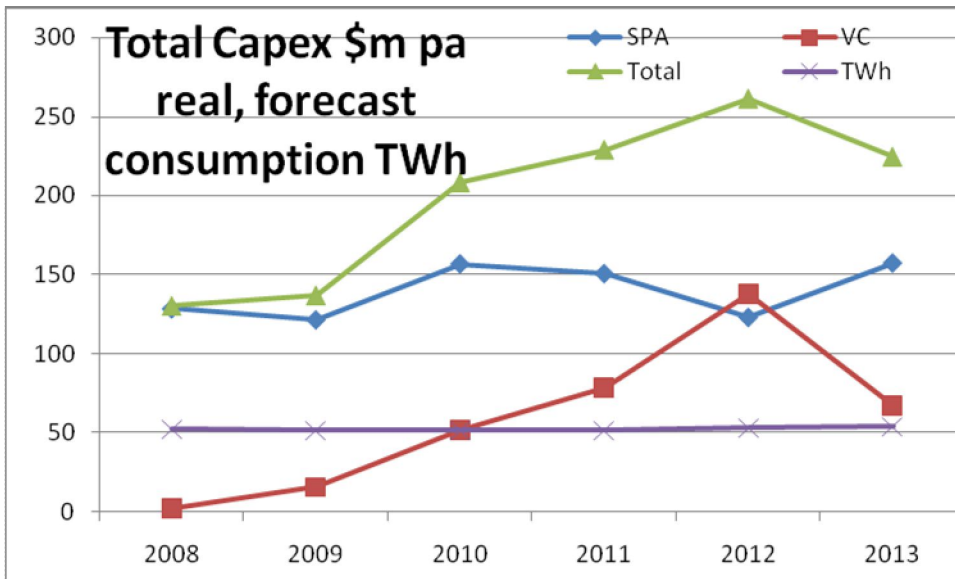
Where it can be demonstrated that for specific items costs have grown excessively (such as transformers appear to be), then there is a case for analysing the fundamentals for these specific items, and considering them in the context of the overall cost make up of materials and equipment needed by SPA. Further implying a reliance on sourcing equipment only from US, UK and Europe adds an unnecessary and inappropriate bias.

EUCV therefore believes a much more balanced approach to assessing capex is needed bearing in mind that there is considerable doubt as to the validity of the SPA claim of large increases in the costs to supply material used by them, causing them to increase dramatically their capex allowances.

7.3 The combined capex of SPA and VENCORP

The relationship in Victoria between SPA and VENCORP is that SPA maintains its own assets only and VENCORP develops the electricity transmission network to provide augmentations and the ability to transfer greater amounts of electricity.

Based on data from SPA and VENCORP applications, the total forecast capex pa (and the forecast changes in consumption) is shown on the following chart.



Source: Derived by EUCV

The combined capex for both VENCORP and SPA over the period is massive, both in relation to the expected marginal change in consumption and in relation to the starting RAB. In total, there is expected to be nearly \$1200m spent on capital against a RAB estimated by SPA of \$2222.9m. This means capex to be spent over the next 6 years is 54% of the starting RAB, yet there is expected minimal growth in consumption.

VENCORP estimates that the cost of transmission will rise from \$7.7/MWh in 2008 by 43% to \$11/MWh in 2013 in nominal terms.

7.4 Is there double counting?

Whilst the arrangement between SPA and VENCORP provides a clear demarcation between the two entities where there is capacity in the SPA assets to manage increased demands, it creates a “grey” area when capacity of existing assets is reached or exceeded. SPA notes that for a number of substations, there is no spare capacity to meet NEM Rules for redundancy.

Of concern to EUCV is that there is a potential for double counting between VENCORP and its augmentations, and SPA increasing its capacity to meet NEM Rules.

If there has been some double counting, then the calculated increase in capex might not be as excessive as it appears. If this is not the case then there is a need for a much more careful examination of the claimed capex.

7.5 The relationship between capex and opex

As noted above in section 5.3, there is a relationship between capex and opex. With the increase in capex for refurbishment, there must be a proportionate reduction in opex, as this is what justifies the replacement of old assets with new assets. Notwithstanding this inverse relationship, SPA proposes to increase its opex from current levels.

Where there is growth in a network there is an expectation that there would be additional opex attributable for new capex, but where capex is about replacing old assets with new, or replacing old with something new but larger, there is no justification for added opex.

The AER must recognise the inter-relation between capex and opex as far as the SPA application is concerned. The fact that SPA has no responsibility for augmentation of the network (this is a VENCORP responsibility) makes the relationship between capex and opex, one of offsets for SPA, (based on the principle that an increase in SPA capex must lead to a reduction in SPA opex), and that the starting opex is the current level of opex, and not the inflated level requested in the application!

SPA has stated that the capex has increased in part due to higher prices. If this is the case then the commercial relationship between capex and opex becomes even more important. If the cost to replace the assets increases, then from a consumer viewpoint it is more economically efficient for the opex to be maintained rather than pay a higher cost as a result of new assets replacing old (ceteris Paribas).

In section 5.1 above it is pointed out that there is an economic driver for TNSPs to replace assets rather than continue with incurring opex. It is the building block approach which provides this driver, as opex is recovered at cost whereas assets achieve a return which provides the profits for the regulated business.

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

7.6 Views on the specific capex claimed

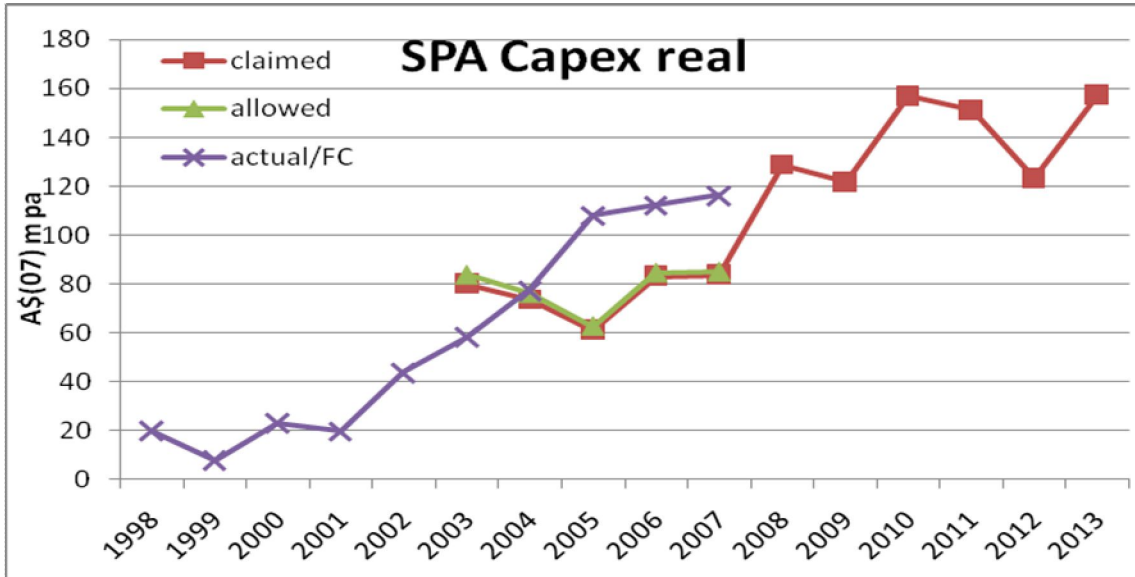
EUCV notes that SPA intends to use the higher priced GIS switchgear in its replacement of existing switchgear. EUCV notes that GIS switchgear is regularly used where there is reduced space for locating switchgear. However where SPA has adequate space for using less expensive but more bulky switchgear, EUCV notes that GIS switchgear can be up to three times the cost of other but acceptable switchgear, and therefore it queries whether there is a driving rationale for using the more expensive equipment.

The AER should request of its consultants that costing of planned projects should be based on the impacts of the access and space available as much as on the hardware proposed.

However on a larger scale, in the absence of a clear appreciation of whether there is a case for replacement of existing assets, **the EUCV must rely on the AER and its consultants to identify the commercial logic for undertaking the capex program proposed by SPA. The AER must ensure that its consultants are fully aware of the incentive for SPA to invest capital rather than continue with opex.**

EUCV notes that SPA has commissioned a number of surveys of its assets, but it must be accepted that, as did the AEMC during discussions in developing the new Rules Chapter 6A, a consultant employed by the TNSP cannot be accepted be a fully independent assessor of the status of a TNSP's assets. Its view has an added impact if it is recognised that there is a commercial driver to replace assets (ie increasing the RAB) as it is this aspect which provides the profits sought by the TNSP. Accordingly the AER should undertake its own objective assessment.

The following chart includes the SPA claimed, actual and allowed amounts of capex derived from the current and previous SPA applications.



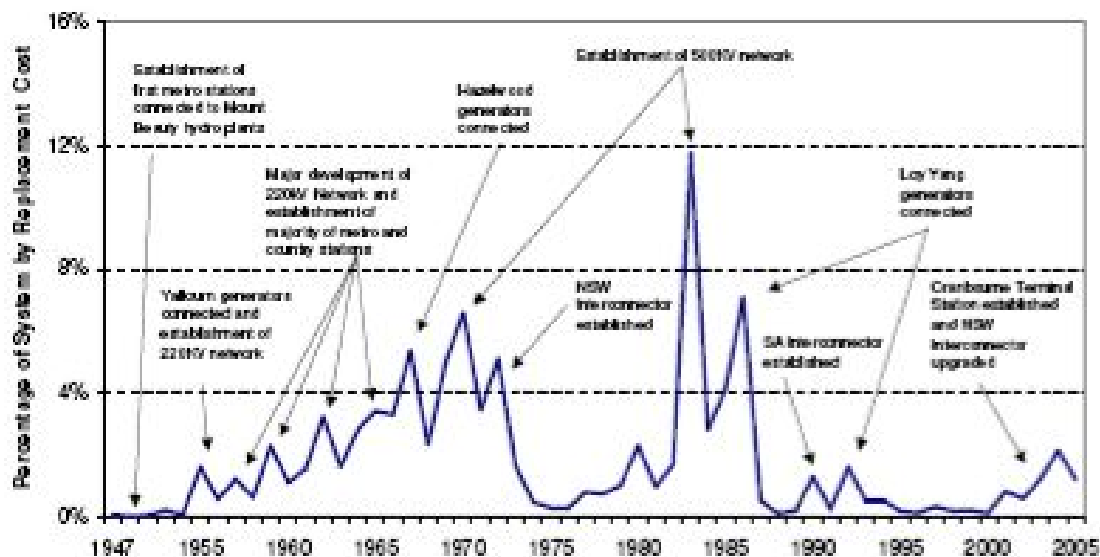
Source: Derived by EUCV

It would appear from the actual capital expenditure that previous owners of the assets did not invest capital at the same rate as SPA has since it purchased the assets, nor how it intends to invest. It should be pointed out that the last two amounts of actual capex included in this chart are noted by SPA as being forecasts, and therefore there must be some doubt as to whether these amounts will actually be expended.

It also must be noted that the actual capex was based on a period when the expected forecast growth in demand and consumption was much higher than is expected for the next six years (see section 2.3 above). Notwithstanding this significant reduction in growth, SPA is requesting an ever increasing amount of capex.

In its application (figure 2.2.3) SPA provides a profile of its assets and their age. The implication of this chart is that on a weighted basis the average age of the SPA assets is about 30 years old. This age is contemporaneous with most of the other TNSPs in the NEM.

Figure 2.2.3 Historical Development of Victorian Transmission System



Source: EP AusNet

Presupposing capex for 06/07 and 07/08 is made as forecast and the capex claimed by SPA is also expended, the impact of this new capital would be to “claw back” the average age of the SPA assets – the impact of this expenditure would be to reduce the average age by some 3 years at the end of the new regulatory period.

The EUCV requests that the AER examine the capex claim in detail with reference to the impact on the average asset age by the recent and forecast levels of expenditure. This is another method for ascertaining the reasonableness of the capex claim.

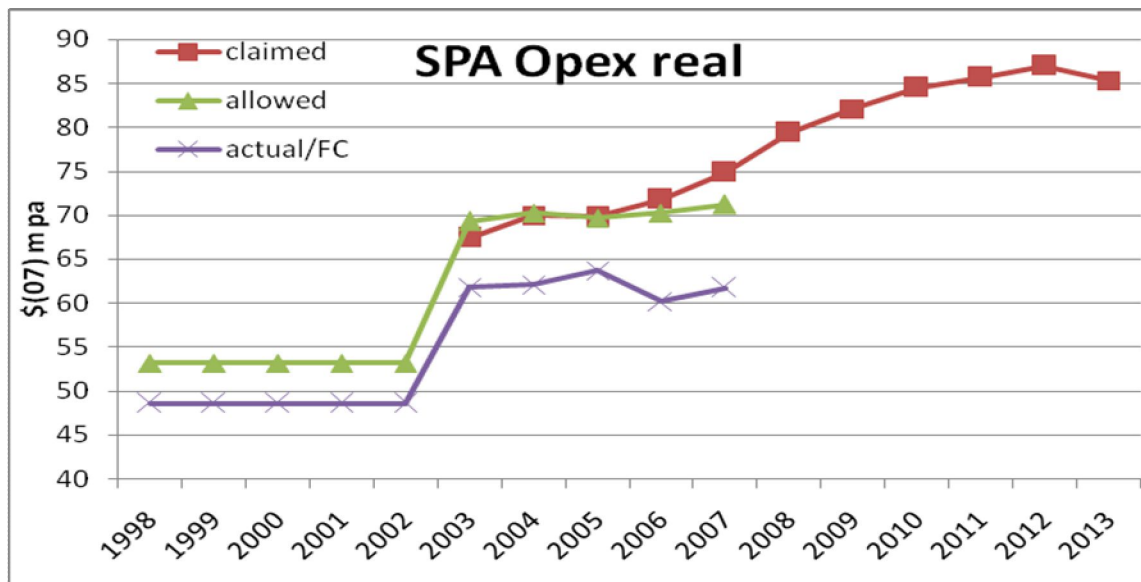
8. SPA Efficiency gain

The EUCV is totally supportive of an opex incentive scheme to encourage regulated businesses to reduce their costs. The benefit of this is that SPA can reduce the costs of providing the service, and by sharing the savings with SPA, consumers will be better off in the long term.

There are two caveats to this in-principle support

1. The savings should be the outcome of actions by SPA and not just because SPA was able to convince the regulator at the last reset to give a comfortable allowance, and
2. The savings achieved will continue to be shared for a period into the future.

SPA advises that there was an underrun in the opex allowances granted in 2002, by an average of some \$8m pa, about 11% of the opex allowance granted by the ACCC in 2002. The following chart is the same as that developed for section 6 above.



Source: Derived by EUCV

SPA should not have included for assets associated with growth – this work is carried out by VENCORP on a basis of supply and maintenance for a given period. Therefore SPA is responsible for only maintenance of existing assets. With its capex increasing we should also see a reduction in opex as the assets become younger. This trend is not appropriately recognised in the forecasts.

Historical actual capex has always trended below allowed opex. The clear implication is that the regulator has consistently over provided for opex, and SPA has benefitted from this and been allowed to retain all of the savings from the allowed amounts being over stated. [As this is a typical trend amongst all regulated businesses, it is expected that regulators would now be alert to this approach.]

The fact that the actual opex has never even approached the allowed level gives rise to a very real concern that the bulk of the opex under run since 1998 has been the result of regulator “gaming” rather than SPA causing real savings from their own actions.

The EUCV does not support providing SPA a benefit which is unjustifiable and contributes to an incentive to overstate opex claims by excessive amounts.

With this real concern in mind, (as demonstrated empirically above) it is suggested that the AER seeks detailed advice from SPA supporting that savings really have been achieved by direct operational actions of SPA. SPA must be required to provide details of specific actions they have taken, and the resultant cost savings that resulted before any sharing of this opex underrun is permitted, as from our calculations SPA has already benefitted by over \$40m as a result of this underrun.

As this underrun is so consistent, the EUCV is sceptical as to its validity as an earned underrun. We are of the view that unless SPA can prove that it really did generate this sort of saving, there is no justification for any carry over into the next period.

9. Service standards

SP Ausnet has advised that its service standards performance has been good and provided the following table demonstrating this.

Table 4.2.1: Performance incentive scheme – performance against targets

	Target	2003	2004	2005	2006	Weight
Availability Measures	%					%MAR
Total Circuit Availability	99.20	99.323	99.269	99.341	99.257	0.1
Peak Critical Availability	99.90	99.787	99.974	99.945	99.878	0.075
Peak Non-critical Availability	99.85	99.841	99.571	99.857	99.787	0.025
Intermediate Critical Availability	99.85	99.479	99.804	99.745	99.556	0.025
Intermediate Non-critical Availability	99.75	99.338	99.394	98.21	98.765	0.025
Loss of Supply Event Index	No.					
>0.05 min per annum	2	3	2	5	5	0
>0.3 min per annum	1	0	0	2	3	0
Average Outage Duration	hours					
Lines	10	9.978	2.73	7.542	33.379	0.125
Transformers	10	7.659	4.862	6.644	7.692	0.125

As can be seen SPA performed at above target in the two most critical areas of circuit availability, and on average outage durations (except for 2006). These are all areas where SPA receives the most commercial benefit. It performed below standard on non critical availability and reasonably close but under on critical intermediate availability.

On a weighted basis it performed credibly on aspects which contribute to 85% of it earning a bonus. Only 0.5% of its MAR was at risk for performance achievements.

Additionally SPA was exposed to a bonus arrangement with VENCORP, where a fund representing a set amount is included in the opex, and from which SPA makes payments for poor performance. It retains any surplus in the fund after payments are made to VENCORP.

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In the next period SPA wishes to retain the VENCORP incentive arrangement and to have 1% of its MAR at risk for performance issues.

SPA now wants to revise its targets and double the amount at risk. This is shown in the following table

	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

The EUCV analysis of the actual performance, the new target proposed and the amount of benefit from achievement indicates that SPA is proposing lower targets and higher rewards for achieving these. This is particularly relevant if the key outliers (eg the 33.93 in 2006 for line outage) are eliminated.

The EUCV supports the principle of rewarding for better service, but such rewards should be earned by greater dedication and effort, and not by setting lower targets.

SPA has requested very large increases in capex and opex, and this should result in better performance overall in the absence of any rewards. What we see

is that a lower overall performance is proposed by SPA, with an increased reward for achievement. What is of concern is that it is consumers that will pay for the increased capex and opex that will cause the improvements in performance.

The past performance outcomes are an indication of what can be achieved with current levels of capex and opex, not at the new levels. If greater expenditure is made then the targets must be higher, not lower.

The AER must ensure that the performance targets reflect the outcomes of the capex and opex programs built into the new reset. In particular the current levels of performance are being achieved with current levels of capex and opex. If capex and/or opex allowances increase, then this must be accompanied by higher performance targets.

Appendix A –

MAJOR ENERGY USERS INC.

THE VOICE OF ENERGY CONSUMERS

**The Securities Market's Analysis of the AEMC's
Determination on Electricity Transmission Revenue**

By

The Major Energy Users Inc

January 2007

**This monograph has been prepared for Major Energy Users Inc by Headberry Partners and Bob
Lim & Co.**

The conclusions reached are those of EUCV and the authors.

Before market data on Utilities was available

Prior to 2001, there was no suitable ASX index available to Australian energy regulators to assist in establishing an equity beta for the class of energy transport **Utilities** from which could be calculated a regulated revenue stream (arising from the economic regulation of monopoly network businesses). Because there was no such specific asset class regulators had to interpolate an appropriate equity beta from indices published for other asset classes.

For example, in 2002¹³ the ACCC used the following chart of equity betas prepared by the AGSM in order to develop a specific **Utilities** equity beta.

¹³ As used in the draft decision for ElectraNet in 2002

Table 2.2 Average equity beta by industry listed on the ASX

Industry	Average Equity Beta
Property Trusts	0.366
Alcohol and Tobacco	0.420
Food and Household	0.424
Transport	0.463
Diversified Industrials	0.719
Engineering	0.756
Building Materials	0.857
Paper and Packaging	0.953
Developers and Contractors	0.954
Banks and Finance	0.967
Infrastructure and Utilities	0.983
Tourism and Leisure	1.084
Chemicals	1.128
Investment and Financial Services	1.131
Retail	1.269
Mining and Energy	1.305
Insurance	1.394
Other Metals	1.502
Miscellaneous Industrials	1.568
Diversified resources	1.571
Gold	1.678
HealthCare and Bio-Technology	1.899
Media	2.076
Telecommunications	2.772

Source: Australian Graduate School of Management centre for research in finance; risk measurement service

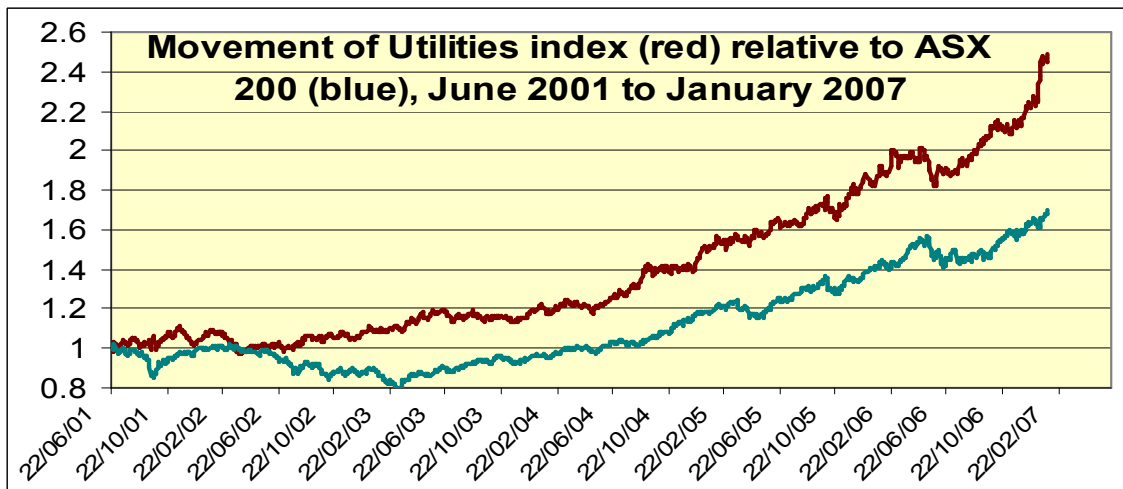
Based on the above listing, the ACCC determined that an equity beta of **unity** was appropriate as this was about the same as the equity beta for the index for **Infrastructure and Utilities**. The ACCC has not changed this value for equity beta since that time. Almost all jurisdictional regulators have used an equity beta less than 1.0 in recent decisions, using equity betas as low as 0.8 for electricity utilities (eg ESCoSA on ETSA Utilities although this was revised to 0.9 on appeal) and 0.75 for water Utilities (eg ESCoV).

The clear import was that an equity beta of 1.0 was seen by most regulators as being too high.

Market data is now available for Utilities

Since June 2001, the ASX (with Standard and Poors) has published details of an asset class (and an index) purely for **Utilities** coded XUJ. This index comprises the listed gas utilities such as APT, Envestra, Alinta and the listed electricity utilities such as Spark and SP Ausnet. These asset owning companies cover electricity and gas Utilities in Victoria, South Australia, Western Australia, Northern Territory, Queensland and NSW. The movement of this index relative to the ASX 200 is best shown using the starting point of both indices as unity.

Analysis of the financial performance of **Utilities** compared to the market average shows that **Utilities** have significantly out performed the market (as typified by the ASX 200). In fact, the **Utilities** index has increased at a rate 50% more than the rate of increase of the ASX 200 over a period of nearly six years of its existence. Based on five year trend lines the performance of the **Utilities** index implies a market risk premium (MRP) of 11.26% using the equity beta of 1.0 as used by ESCoV, whereas the ASX 200 shows an MRP of 4.5% at an equity beta of 1.36 derived from an asset beta of 1.0 and gearing of 36%¹⁴.



Source: CommSec

¹⁴ See appendix 1 showing gearing of the "All Ords" as D/E = 36%

The ASX200 was used as the surrogate index for the average of the market performance as it comprises the companies comprising the bulk of the ASX's market capitalisation.

The Major Energy Users Inc. (MEU) has previously provided information to the AEMC (during its review of electricity transmission revenue and pricing) that the outworkings of the performance of the **Utilities** index implied a market risk premium (based on an equity beta of 1.0 used by AER and ESCoV) of nearly twice that used by regulators of 6%.

The impact on equity beta

Analysis of the risk and stability performance of the **Utilities** index by the independent assessor CommSec implies an asset beta of 0.3 is typical for this class of assets as measured over the past 5-6 years. This compares well with the observed asset beta for similar utilities operating in other countries, such as the US. The following table 9.5 provided by the ESCoV in its recent decision on electricity distribution companies, demonstrates this clearly.

Table 9.5: Lally (2005) asset beta estimates, with equity beta estimates

Source	Data Period	Number of firms in sample	Electricity Utilities Asset Beta	Electricity Utilities Equity Beta	Gas Asset Beta	Gas Equity Beta	Overall Asset Beta	Overall Equity Beta
Value Line	1999 – 2003	83	0.35	0.88	0.17	0.43	0.29	0.73
Value Line	1994 – 1998	147	0.26	0.65	0.26	0.65	0.26	0.65
Bloomberg	2002 – 2003	93	0.27	0.68	0.20	0.50	0.25	0.63
Alexander	1990 – 1994	35	0.33	0.83	0.22	0.55	0.27	0.68
Ibbotson	1999 – 2003	50	0.12	0.30	0.06	0.15	0.11	0.28
Ibbotson	1993 – 1997	108	0.32	0.80	0.33	0.83	0.32	0.80
S&P	1999 – 2003	80	0.18	0.45	0.19	0.48	0.19	0.48
S&P	1994 – 1998	73	0.19	0.48	0.32	0.80	0.26	0.65
S&P	1989 – 1993	65	0.34	0.85	0.29	0.73	0.32	0.80
Median			0.27	0.68	0.22	0.55	0.26	0.65

Source: Lally (2005, p. 14). The Commission has generated equity betas consistent with 60 per cent gearing.

A continuing view has been that the lower levels of historic equity betas, such as those available from the US market were a result of a “tech boom and bust” in the equities markets resulting from the impact of technology stocks of the late 1990s.

Whilst accepting that this “tech boom and bust” might have impacted assessment of equity betas in the early part of this century, nearly six years of recent market data in Australia and overseas supports that the impact of this “tech boom and bust” might well have been grossly overstated (or at least been quite short lived) as equity betas derived after many years since the “boom and bust” period still maintain the similar levels (see appendix 1) as they were during the period of the “tech boom and bust”.

CommSec has also noted that the current (30 Jan 07) gearing of the **Utilities** sector is 102% (Debt/Equity) which when used with the current (30 Jan 07) asset beta of 0.39, results in an equity beta of 0.79. Previous values of asset beta developed by CommSec were significantly lower than the current 0.39, implying that the current equity beta of 0.79 is on the high side of the average. Attached as appendix 1 is a summary of the ASX sector analysis provided by CommSec on three separate dates, all some 6 months apart.

Much of this information was provided to the AEMC as part of its review of transmission revenue, but it elected not to investigate this issue at all. Without undertaking any of its own assessment, the AEMC determined in the transmission revenue Rules that transmission companies should be granted a market risk premium of 6% and an equity beta of 1.0, and locked these into the Electricity Rules, preventing any changes being made, although it has required the AER to undertake another review of the CAPM inputs by 2008. **In the meantime all AER reviews must use these AEMC prescribed inputs.**

The AEMC stated that by fixing these inputs in the Rules it created more certainty for transmission companies, and therefore it was likely that increased investment would result. Certainly this would result in more profits for the electricity transmission businesses!

But there was even more from the AEMC

The AEMC also determined that the AER should be more influenced by the claims of the transmission companies for opex and capex to be included in the revenue application and determined that the AER role in oversighting past capex incurred should be prudent and efficient should be minimal.. Again, the AEMC concluded that this would provide an incentive for the transmission companies to invest – it certainly enables the businesses to “gold-plate” investments and make life easier for the businesses!

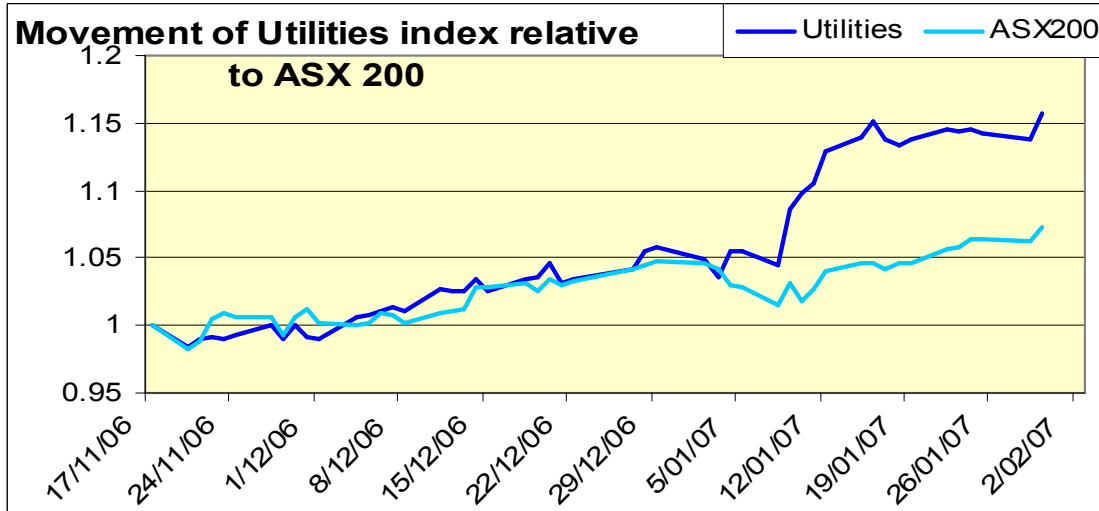
The MEU had pointed out to the AEMC that there had already been significant investment in transmission assets and that transmission companies were in fact not constrained in investing by the regulatory approach, but more by their own inability to manage the investment programs already approved. The MEU requested the AEMC to identify where investment had been constrained, but the AEMC did not undertake any research which might have supported their view.

The MEU had also advised the AEMC that its proposed Rule changes would increase the profitability of transmission companies and not necessarily result in expanding investment. The AEMC ignored this contention.

The AEMC released its final determination and rules on electricity transmission revenue on 17 November 2006 and on transmission pricing on December 21, 2006. Since then, the **Utilities** index has risen so significantly compared to the market average that the release of the AEMC Rule changes and this increase cannot be dissociated from each other.

The following chart shows that the decisions of the AEMC have contributed to a significant increase in the market value of Utilities. Allowing for the time for market analysts to assess the outcome of the AEMC decisions, the chart clearly shows that the market recognises that Santa (in the guise of the AEMC) has delivered an excellent present to Utilities and their investors.

Investors can clearly see that the utilities will be even more profitable businesses (relative to risk) than before. The chart shows a massive outperformance of the Utilities Sector relative to the ASX 200.



Source: CommSec

The chart relates both the Utilities index and the ASX 200 back to unity at 17 November, the day the AEMC released its decision on transmission revenue. On 17 December the AEMC released its decision on transmission pricing. The fact that after an early surge in January as the AEMC decisions were analysed, the spike flattened and the two indices resumed similar but parallel tracking as before.

Whilst the AEMC can state that their decision only relates to electricity transmission, there can be no presumption that this decision will not flow (in whole or part) to all energy transport services of gas transmission and gas and electricity distribution. The earlier efforts by the jurisdictional regulators (ICRC, IPART, ESCoSA and QCA) in reducing equity beta for regulated energy transport businesses and to control any excesses of the regulated energy businesses have come to naught.

It is quite clear that the market has seen the AEMC decision as a Christmas present of the first order.

Appendix 1

Data sourced from Commonwealth Securities Web site								
	ASX code of typical company in sector	Beta			Sector div yield			sector gearing D/E % 30 Jan 07
		27-Feb-06	23-Aug-06	30-Jan-07	27-Feb-06	23-Aug-06	30-Jan-07	
All ords		1.08	1.04	1.02	4.3	4.3	3	36
Consumer discretionary								
Automobiles and components	BOS	1.02	0.86	1.45	6.2	6.2	0.8	
consumer durables and apparel	GUD	1.75	1.39	1.42	5.3	5.2	5.3	44
consumer services	TAH	0.93	1.19	0.96	4.3	3.9	3.3	38
Media	PBL	1.51	1.39	1.03	4.5	4.4	3.9	21
Retailing	HVN	1.18	0.99	0.98	4.6	4.7	3.2	32
Consumer staples								
Food and drug retailing	WOW	0.62	0.64	0.64	3.8	3	3	75
Food beverage and tobacco	LNN	0.58	0.51	0.6	4.3	3.9	3.1	46
Energy		0.96	1.04	1.21	3	2.8	2.8	
Energy Equipment and services	HZN							
Oil and Gas	ORG							
Financials ex property								
Banks	CBA	0.86	0.68	0.82	4.3	4.1	4.4	
Diversified financials - resources	BNB	1.19	1.16	1.17	3.5	3.7	3.6	
Diversified financials - holdings	SOL	1.19	1.16		3.5	3.7		
Insurance	AMP	1.58	1.54	1.44	4.2	4	3	
Property Trusts		1	1.04	1	6.9	6.9	3.8	
Investment trusts management and development	WDC							
	CEQ							
Health Care								
Equipment and services	SHL	1.19	1.09	1.01	2.8	3	2.7	7.2
Pharma & Biotech	SIP	1.81	1.52	1.01	2.3	2.9	2.7	7.2

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Data sourced from Commonwealth Securities Web site								
	ASX code of typical company in sector	Beta			Sector div yield			sector gearing D/E % 30 Jan 07
		27-Feb-06	23-Aug-06	30-Jan-07	27-Feb-06	23-Aug-06	30-Jan-07	
Industrials								
Capital goods	COA	1.11	1.12	1.04	4	4.1	3.6	34
Commercial services and supplies	BXB	1.11	1.19	1.27	4	3.9	3.4	28
Transportation	ADZ	0.9	0.99	0.96	4.7	4.9	3.4	40
Info Tech								
Software and services	CPU	1.82	1.61	1.34	4.6	4.6	3.4	54
hardware and equipment	KYC	1.15	1.02	0.89	4.4	3.9	2.7	0.7
Semiconductors	LGD	1.15	1.02	0.89	0	0	0	58
Materials		1.39	1.15	1.22	3.1	3.2	3.1	
Chemicals	ORI							
Construction materials	ABC							
Containers and packaging	AMC							
Aluminium	AWC							
Diversified metals and mining	BHP							
Gold	NCM							
Precious metals and minerals	ERA							
Steel	BSL							
paper and forest products	PPX							
Telecomms		0.44	0.29	0.37	5.7	6.2	3	15
Diversified	ENG							
Wireless	HTA							
Utilities		0.31	0.23	0.37	5.2	5	4.1	102
Electric	HDF							
gas	ALN							
Multi	SPN							
Unclassified	BQF	1	0.98		6.9	6.9		