Energy Consumers Coalition of South Australia

Australian Energy Regulator

SA Electricity Distribution Revenue Reset

ETSA Utilities Application

A response

by

Energy Consumers Coalition of South Australia

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

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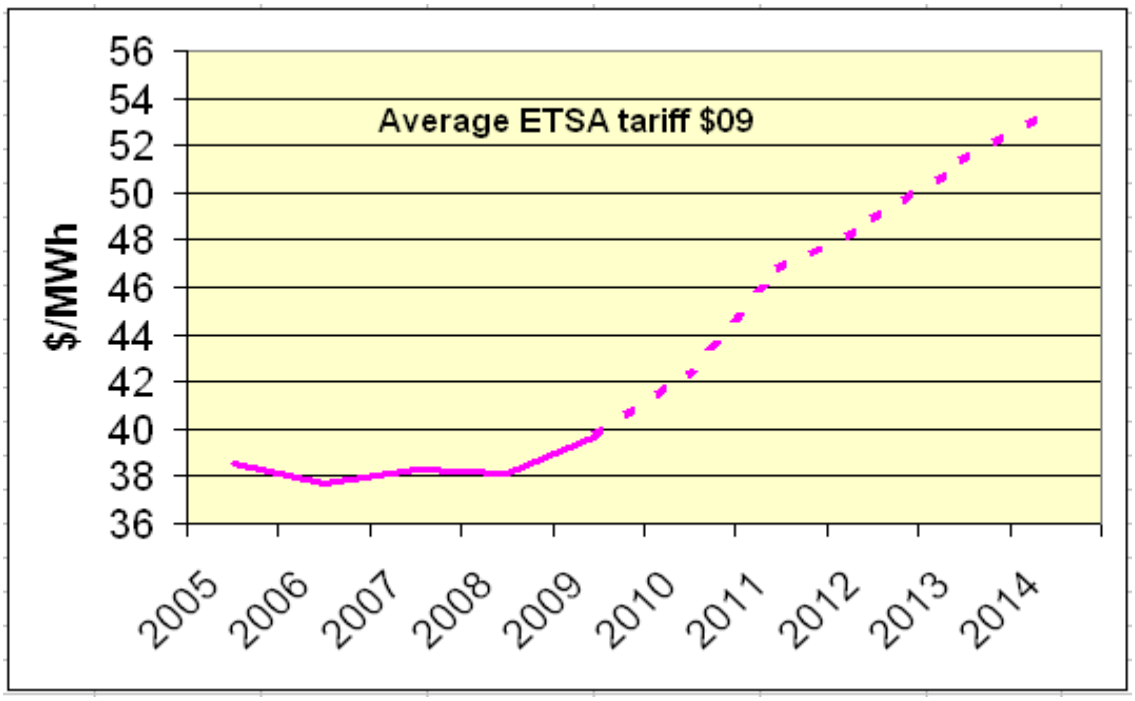
Executive Summary

The Energy Consumers Coalition of South Australia (ECCSA) welcomes the opportunity to provide its review of the ETSA Utilities application for its revenue reset.

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

First, the impact of the ETSA application will dramatically increase the cost of power supplies to consumers in SA. The following chart based on ESCoSA allowed revenue, ESIPC actual and forecast consumption figures, and the ETSA application shows clearly this dramatic cost increase. As can be seen, the previous ESCoSA decision resulted in an average real tariff of about $38-40/MWh, with the ETSA application raising the average tariff by more than 40% over the next five years.



The ECCSA is of the view that such dramatically higher tariff rises are not only excessive, but also unjustifiable. They will result in considerable hardship to many SA electricity consumers and have adverse impacts on downstream industries, already under pressure from the effects of he Global Financial Crisis.

Second, the ETSA review is being undertaken by the AER under a **price cap approach** and not under a revenue cap approach as applies to ElectraNet. This is an important distinction as ETSA draws on many of the AER decisions made in relation to the ElectraNet decision in 2008 to support its arguments for increased costs. With a price cap approach there is potential for further growth in revenue by business as a result of growth in demand and consumption

following the regulatory final decision; this does not apply to a revenue cap approach. Therefore much of the cost ETSA will incur resulting from growth is met from the increased revenue caused by this growth. The ECCSA response provides its views on the application where it considers aspects of the ETSA explanations for requiring additional revenue have little justification because of this difference. It seems that all regulated businesses use previous decisions of the AER to ramp up their justifications for increased revenue – this approach of the regulated businesses is a form of regulatory gaming and the AER needs to address the matter at every reset review.

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

The above aspects are being emphasized by ECCSA because it is demonstrably clear that the ETSA application is an ambitious ambit claim, based on:-

- An increase in average tariff of more than 40% (real) over the next five years
- Significantly increased capex proposals, which bear little resemblance to the forecast growth in demand and consumption
- Significantly increased opex proposals, which are not the result of step changes imposed on ETSA
- Insufficient and inappropriate justification for the inflated cost claims
- Assessments of capital investment, which do not relate risk to timing of the investment, preventing a careful assessment of whether delays in capital investment are appropriate or not.

Overall, the ECCSA considers that ETSA has utilised every opportunity to inflate costs in its application as it recognises that the new Rules provide very limited recourse after the event for the AER make future restitution for over compensating the regulated entity.

There is a clear indication that the decisions made by ESCoSA in 2004 have delivered an electricity network service that meets the needs of the SA electricity consumers. To change from the proven ESCoSA approach and to deliver large increases in revenue to ETSA is not warranted.

1. Introduction

1.1 The ECCSA

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

The ECCSA welcomes the opportunity to provide comments on the AER's review of the revenue reset for the South Australian electricity transmission system.

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

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

1.2 The scope of this review

ECCSA recognises that the AER is required to carry out its review in accordance with the recently changed Chapter 6 of the Electricity Rules without any transition Rules applying (as they did for the recent NSW distribution review. These new Rules (being based on the AEMC developed transmission Rules) need to be seen as being pro investment, as the AEMC stated that this was the focus of its Rule development approach. Equally, consumers have assessed the new Rules (both transmission and distribution) to be biased and unbalanced. The ECCSA notes that the AER is quite heavily constrained in its ability to exercise a 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, whilst not fully predetermined by transition Rules (as in the case for the NSW distribution review) or by the recent AER WACC parameter determination (as is the case for transmission), we consider the AER must take significant cognizance of its recent determination on WACC, which was released in May of this year. In addition, the ECCSA notes that the degree to which the AER can determine any exclusion of future actual 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.

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

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

1.3 An overview of the ETSA capex applications

It is quite clear that ETSA has taken to heart the fact that the new Rules are to encourage investment. Across the board capex demands are significantly inflated from the current period, as is opex. Against this backdrop, it is noted that there is a very modest increase in consumption, and a slightly higher increased forecast in demand projected.

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

ETSA has requested a real step increase in revenue of 10% followed by 10% real increases for each of the following years. What is not addressed by ETSA is the impact this will have on electricity consumers specifically their ability to pay for such large annual increases

The ECCSA considers there is essentially an inconsistent proposition being propounded by ETSA. Either ESCoSA was badly incorrect in the setting of the revenues for ETSA in 2005, or ETSA is using the new Electricity Rules to attempt to convince the AER that they are entitled to such large step increases now and high annual increases thereafter. The ECCSA, however, considers that the claims by ETSA are clearly ambit and need very rigorous pruning.

In this regard it is pertinent to highlight a recent press release from Spark Infrastructure (part owner of ETSA). In the Australian Financial Review 25 August 2009 (page 20), in the following article highlights a concern that the ETSA capex claim is purely driven by profits more than need.

> "**Expansion to power earnings**
> ... Spark infrastructure is confident a proposal to the federal energy regulator to more than double capital expenditure over the next five years will succeed.
>
> Spark is hopeful of a positive result when the Australian Energy Regulator tables its interim decision by the end of November
>
> The group approached the agency about two months ago, seeking permission to lift prices by 10 per cent a year
>
> ..."We are confident our justifications will stand up" [said Spark CEO Laura Reed]"

The clear import of such a report is that Spark seeks to increase the capex allowance so that it will increase its profitability. This is the same view that ECCSA has in regard to the massive ETSA claim for capex for the coming period and ECCSA adjures the AER to assess the capex claim in this light.

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

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

In this regard the AER should assess not so much that there may be a need for the capex claimed by ETSA, but whether the implementation of all these capital projects is essential **to be implemented now** and can it be accepted

that to carryout such an enhanced program when resources are likely to be scarce (and therefore more expensive) due to all other electricity monopolies implementing large capital programs, that such commitments can be considered economically efficient. As the National Electricity Law objective requires the AER to ensure regulated businesses are permitted to allow only "…efficient investment in … electricity services …" the AER must take into account whether deferral of some of the proposed investments is likely to result in a more economically efficient outcome. The second reading speech for the NEL makes it very clear that reference to efficiency in the objective must be considered in economic terms:

> "The market objective is an economic concept and should be interpreted as such. For example, investment in and use of electricity services will be efficient when services are supplied in the long run at least cost, resources including infrastructure are used to deliver the greatest possible benefit…"[1]

ETSA provides reasons (many of them legitimate) for needing their large capex program but there is no attempt to demonstrate whether the implementation of these programs **in the time frames proposed** when economic conditions are so uncertain and when resources in the electricity supply industry might be scarce, is efficient in economic terms.

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

In fact ETSA provides information which they allege demonstrates that the costs for the capex program are well above long term price indices, and this is used to justify the higher than expected capex program. This then raises a fundamental question – would a prudent investor build now, or would the prudent investor defer investing at a time when costs are higher than normal.

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

[1] SA House of Assembly 9 February 2005, Hansard page 1452

some time in the future, the sales and revenue for such entities will be essentially the same.

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

1.4 An overview of the DB opex applications

The introduction of the incentive to ensure opex is more efficient for Victorian electricity DBs was introduced in 2000. ESCoSA also attempted to incentivise ETSA to operate at efficient levels of opex. The purpose behind this approach was to identify the level of efficient operating expense so that this level could be used from which analysis of step changes could be made so that opex continued to be efficient.

What we are seeing is a new growth industry to convince the regulator that opex must be consistently increased at each regulatory review. Despite the fact that growth in consumption and demand is projected to be less than inflation (as measured by the consumer price index) ETSA has applied for large step changes in opex.

In the Victorian EDPR of 2005 the regulator (ESCV) implemented a very structured approach to step changes and required each DB to cost in detail the impacts of the various step changes they had identified to warrant an increase in opex. The ESCV denied a number of the step changes claimed as it considered there was not step change warranted. The ESCV went further and challenged the amounts claimed for each sustainable step change.

ESCoSA took a less formalized approach but did attempt to follow a similar practice. The AER has attempted to follow a similar practice of incentivizing efficient opex through its EBSS approach in transmission but this has been less successful than the Victorian approach.

1.5 The ECCSA'S General View

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

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

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

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

The ECCSA would expect the AER to have regard to the ability of ETSA and ElectraNet (with its ex ante and contingent allowances for capex), which together have been granted or are proposing some $4 billion in capex for this regulatory period, to implement such a significant large combined capital program in South Australia against the background of:

- Potential supply constraints in the industries supplying equipment and materials to the electricity transport industries in SA, NSW, Victoria, Tasmania and Queensland
- Potential constraints in the supply of skilled labour due to the large capital programs already approved in other regions by the AER and thereby limiting resources.

These constraints are being imposed by:

- Over $30 billion in new power generation assets reported to be required over the next 5 or so years in the National Electricity Market
- The investment in the electricity supply chain to manage the increase in renewable electricity required under the xRET
- Over $6 billion in new capex already approved by the AER at regulatory resets for SP Ausnet, TransGrid, Transend and Powerlink.
- Nearly $27 billion in new capex that has been requested (Queensland) or been granted (NSW) for electricity network

businesses in Queensland and NSW in this regulatory cycle, and to this has to be added the capex claimed by Western Power in WA and about to be claimed by the Victorian DBs

- In addition to these amounts is an expectation of additional capex resulting from the decision to allow the inclusion of contingent projects as well as the agreed ante capex amounts allowed for in regulatory decisions

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

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

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

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

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

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

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

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

1.6 Summary

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

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

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

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

2. Total Ex-Ante Capital Allowance

2.1 An overview of the ETSA capex claim

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

The ECCSA acknowledges that there is a reducing load factor in the networks, driven predominantly by the growth and penetration of residential air conditioning. The increasing demand resulting from this trend is not matched by the same increase in consumption, and as a result load factor is reducing. The outworkings of this reducing load factor is a need to increase capex to match the change in demand rather than in consumption. This means that costs are not related to consumption. However it also requires ETSA and the AER to ensure that the costs for matching this increase in capex are properly recovered from those causing the need.

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

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

On the surface, there would appear to be considerable scope for capital deferment or smoothing in the third area above (i.e. asset renewal) through targeted maintenance programs, and the AER should develop a set of principles to guide its assessments of asset renewal that could be deferred into another regulatory period. However, there is also scope for capex avoidance in the first two areas above (i.e. growth and reliability obligation). Here the AER and its consultants would need to rigorously test the capex proposals submitted. For example, why is it absolutely necessary for such obligations to become sacrosanct? Under government control the vertically integrated ETSA was required to allocate the limited capital made available to it by the government, to maximise reliability rather than blindly comply with reliability standards set by another party which has not assessed the financial imposts for their achievement. The AER has the right to advise the SA government and its agencies that the achievement of reliability standards set will be at a level of expense that might not be warranted.

In the ECCSA's view, the AER has another important challenge in assessing capex proposals. As a result of the biased and unbalanced[2] Chapter 6 Rules determination (based on the AEMC development of the chapter 6A Rules for transmission which overtly over incentivise investments), there is so much scope for network businesses to game the regulatory process, so much so that they could, metaphorically, drive a truck through the AER's approved capex program. Under the Rules:

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

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

[2] Biased and unbalanced in the view that investment has to be incentivised so that cost of errors and imprudent investments will be borne by consumers rather that the business making the decision

background, the AER and its consultants would need to rigorously examine ex-ante capex and contingent capex projects with the view to limiting the scope for gaming to inflate the capex program and RAB over the next two regulatory periods.

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

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

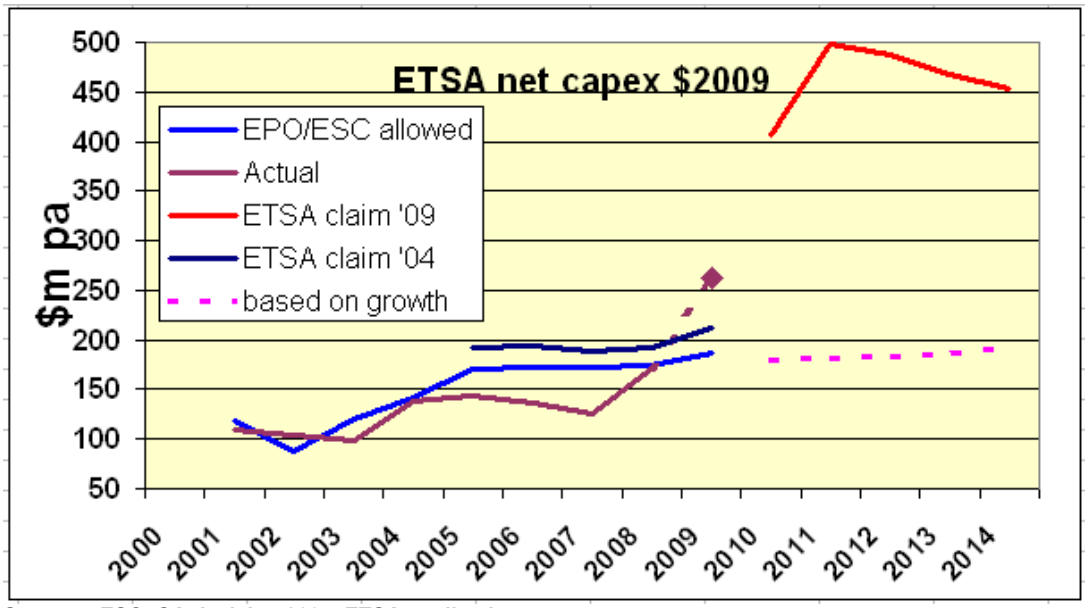
In the following analysis of the ETSA application, the ECCSA shows a trend based on the 07/08 actual capex, extrapolated by the forecast growth in demand. The ECCSA concedes that it provides an indication only. In fact ECCSA considers that the growth in demand is not an unreasonable basis for extrapolation of capex needs.

2.2 The ETSA expectation for capex

The EA application shows that the total forecast capital expenditure is some $2.35 billion for the next regulatory period. Of this some:-

- 43% of this is due to augmentations (capacity and connections) – $1.0 billion (excluding customer contributions),
- 17% in delivering security, safety and reliability – $0.39 billion,
- 20% for asset replacement – $0.47 billion,
- 15% for non-network expenditure - $0.36billion and
- 4% for other expenditure – $0.1 billion.

The following chart shows the historic capex and the new claim for capex. ETSA points out that nearly half of its capex is a result of demand growth. The chart shows how the last recorded actual capex (for 07/08) would change if the increase in demand was the only criterion for setting capex.



Sources: ESCoSA decision 2004, ETSA application

The ETSA application shows a massive increase in capex, far outstripping demand, and seems to indicate that it is seeking an additional $200-300m pa (or a total of $1-1.5 billion overall) in excess of needs. The ETSA claim is totally inconsistent with conventionally accepted criteria for a step change, and at most should be some $1.0-1.2 billion for the period. The excess claimed is ~100% of what is assumed to be reasonable based on the historical capex needs.

In this regard it should be noted that in its last review ETSA claimed about $20m pa more capex than ESCoSA allowed it, and despite this ETSA actually underspent the amount of capex allowed by some $104 m (0r 16%) excluding the forecast over-run for year 09/10.

The ECCSA has a real concern that ETSA (like all the other DBs and TNSPs) is using its capex program as a method of dramatically increasing its profitability, which as noted above, is based on a "gaming" approach implicit in the building block method.

In its application, ETSA makes significant reference to the age of its assets, and the ECCSA points out that this same observation was made in 2004 as being a major justification for the capex program it wanted to implement. Despite its protestations about needing more capex than it was allowed, ESCoSA discounted the claimed capex by ~10%, and even so ETSA still did not use the capex allowed. The saving ETSA made by not expending this capital went directly to its profit line.

There has been much argument about benchmarking of performance as the basis for setting capex and opex needs. The most telling of all performance

benchmarking is that provided by a business of itself, as every electricity transport business in Australia is of the view that its it different to all others and therefore comparative benchmarking is fraught.

The actual performance of ETSA relative to its stated needs clearly indicates:-

- **Network ageing and capex**

  The arguments it presents to claim increases capex do not appear to reflect its own identified needs as a result of ageing of the network as its replacement capex is clearly less than that needed to even hold the current average age.

  The issue of ageing of network assets is not new and was raised by ETSA in the ESCoSA review in 2004. Despite the arguments put by ETSA in relation to its stated concern that its assets are ageing and approaching the end of their economic life, ETSA underspent its allowances for capex.

  This raises questions about ETSA's real concern about this issue.

- **Growth in demand**

  The amount of growth in the current period is much the same as expected for the new period, yet the amount of capex claimed for the current period was not used.

  In the claim by ETSA to ESCoSA for capex, ETSA argued that it needed a capex increase to address increased growth in demand. ECCSA agrees that growth in demand is the main driver for capex. Yet if the growth in the current period is higher than the forecast growth (see section 6 which details the ECCSA analysis of forecast growth) then the amount of capex for growth should be lower than in the current period, yet ETSA is seeking a massive increase in capex, predominantly to service the expected increase in growth.

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

Therefore if ETSA was able to underspend on capex in the current period, but still manages to cater for a larger peak demand growth in the current period, then the current levels of capex should be adequate.

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

- **Escalation of costs**

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

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

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

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

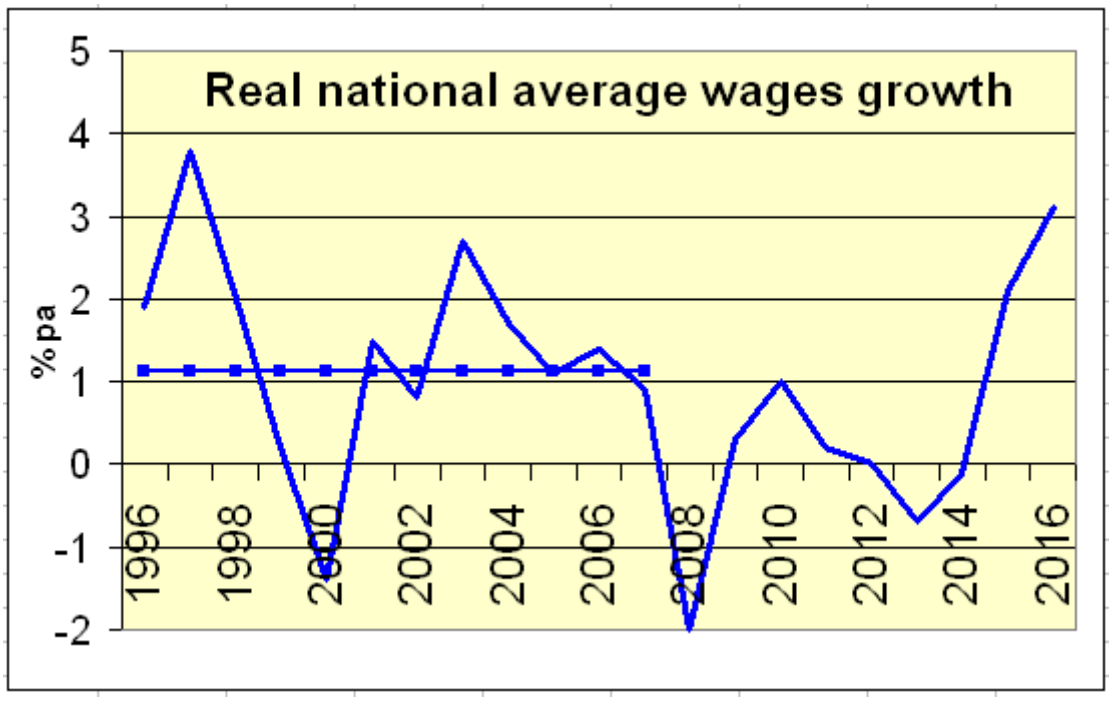
The AER has been allowing electricity transport businesses not to be subject to this downward pressure by allowing the businesses "real" cost increases whereas other businesses have to operate within these cost pressures. The AER approach effectively excludes requiring any of the businesses to achieve any productivity improvements.

2.3 Wages growth

Much of the capex budget is in relation to construction cost, which is driven by construction wages and materials costs. ETSA provides a view that capex should be inflated to allow for the movement in construction wages due to the need to allow future projects to remain within budget.. In fact there is an argument that construction wages are falling relative to average wages (or to put it alternatively, that average wages are catching up construction wages).

ETSA states that its view on wages growth is included in its attachment E4 but this attachment s not included in the publicly available documents

In its March 2009 report to the AER[3], Econtech points out that over the previous period the wages nationally have moved (on average) in the following way:



Source: Data from Econtech

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

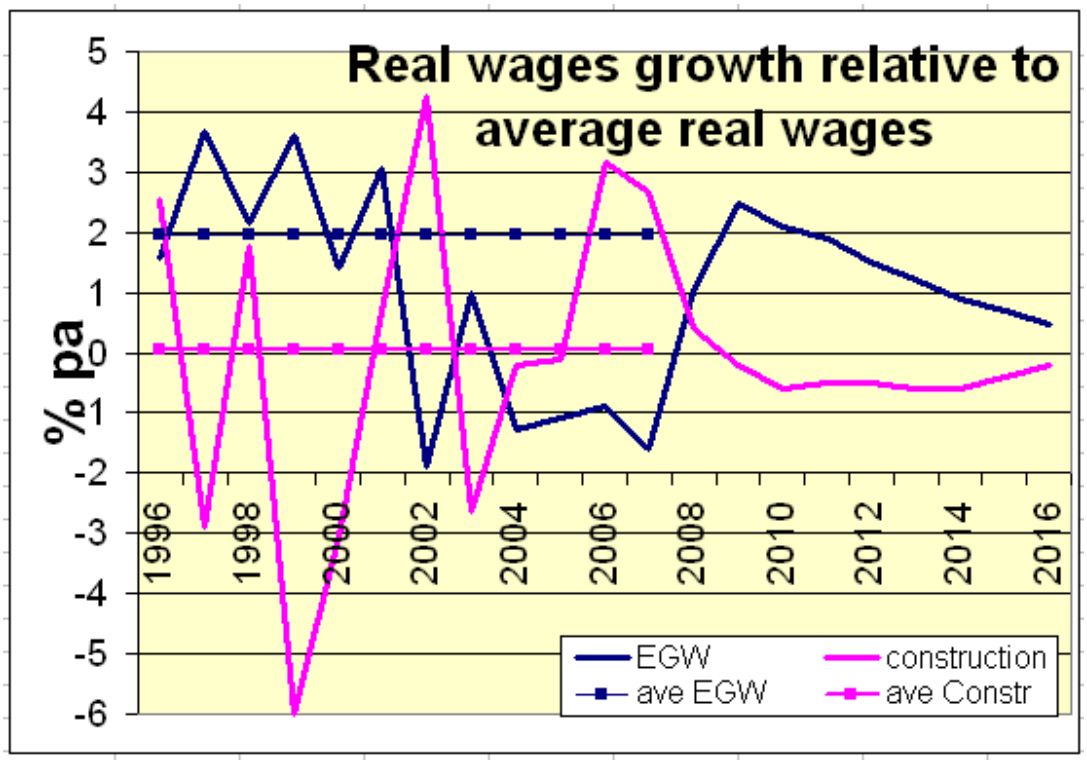
In this regard it is pertinent to observe that ETSA under-used its capex allowance in the current period when wages were higher than is forecast for the next period.

[3] KPMG/Econtech Updated Labour Cost Growth Forecasts 25 March 2009 table B4

The same report (in table B4) shows that:

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

- Historically the cost of EGW labour is higher than average wages and that for the 07/08 to 16/17 decade will be about the average of the past two decades, or less. This wages outperformance is a measure of the productivity of the sector.



Source: Econtech data

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

The reverse also applies. Where the wage growth is less than the long term average, the AER should apply a discount to the forecast capex.

There is clear evidence that there is no need at all to increase the allowance for capex to reflect rising construction and EGW wages growth as there is no demonstrable forecast that there is an overall increase in the average

long term wages, and to allow any increase is to deny consumers the benefits of labour productivity – recognising that productivity growth is caused by the pressure of competition.

2.4 Material cost growth

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

The purpose of the approach in the Rules to the capex (and opex) allowance is to identify step changes from one period to another. It is clear that assessments made by the AER in some previous reviews with regard to materials cost escalation was that the rate of increase of materials used by the businesses was seen in context of a rapidly increasing cost of supply of a number of materials during particularly in the years of 2006 and 2007 where the cost of material increased dramatically above the long term rate of change. Since that time the prices of materials have fallen significantly and are now much closer to long term averages.

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

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

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

In principle, the ECCSA does not support such an approach as proposed by ETSA, as it implies that the AER will forever be subject to having to forecast the movement in materials costs, rather than allowing for step changes when and if they occur.

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

2.5 Early retirement of assets

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

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

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

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

In the past, MEU and ECCSA members have seen electricity supply authorities continue to use assets long after the asset has been written off financially, so the technical life of many assets is really longer than the average time used to financially depreciate the assets in the building block approach. Physical life of an asset is related to many more aspects than

just time. Assets lightly used and well maintained will generally be useful longer than the expected asset life. The care used in manufacturing and the basic design parameters also greatly impact on asset longevity. One MEU members cites the example of where equipment built in the 1930s and an expected life of some 40 years, was till being used early in this decade.

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

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

2.6 When should assets be replaced?

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

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

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

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

2.7 The capex claim and timing

ETSA has provided a list of new capital projects, and a justification of each. What has not been done is a risk assessment of the likely downside if the work is delayed. Such an analysis requires a series of estimates of the risk for increasing periods of delay. Until such an assessment is made and the risks analysed, the AER cannot approve any of the capex programs. The AER needs to put itself in the role of the directors of the business to ensure that the capex has been assessed properly in terms of the market impact.

It has been stated that this is a role for the actual directors of the business. This is not so. Once the regulator has given approval for a capital project, the directors of the business know they are assured of receiving a guaranteed return on the investment. This takes away from the directors of the business any of the risk for authorizing the capital expenditure.

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

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

However, unless the AER carries out such a risk analysis, it will be not done. The jurisdiction has abrogated this role and the DBs do not need to carryout the role, leaving the responsibility entirely with the AER, who has the responsibility also of ensuring the revenue allowed is economically efficient.

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

2.8 Capex overall

ETSA has made a claim for a massive increase in its capex for the next period, increasing its current actual capex by some 2-3 times. It has based this need for such a large amount of capex on four main aspects:-

1. Growth
2. Replacement
3. Increased security, reliability and safety
4. Non-network and other

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

- Forecast growth (both in peak demand and consumption) is less than in the current period, implying there is no step change
- ETSA underspent its capex allowance implying that the current rate of asset replacement is adequate for its needs
- ETSA has not sustained an argument that it is subject to increased safety requirements – in fact ETSA in table 6 implies that there is no increased safety or environmental requirements, and therefore these costs should be the same as in the current period
- ETSA does have to increase the reliability of the CBD and Kangaroo Island so these are step changes
- Does the non-network expense result in a step change? ETSA alleges that due to its increase in size, it needs to spend to manage this requirement. Equally if the capex is reduced then the need for this non-network capex is reduced. Expenditure of same 10% of the capex budget seems excessive for this task
- A significant amount of the capex is for equity raising costs. If the amount of increased equity required is less due to a less aggressive capex program, this reduction will result in a lower equity raising cost
- In sections 2.3 and 2.4 above, there is no sustainable reason for the current capex allowance to be increased by $45m due to increased labour and materials costs. In fact, there is an argument that as ETSA was able to accommodate the large increases in labour and materials costs seen in 2006 and 2007 and still under-run on the capex allowance, that there should be a discount applied (rather than an increase) to the capex budget.

ETSA advises that it has two projects that are the result of step changes – the CBD reliability upgrade associated with the transmission code change, and the duplication of feed to Kangaroo Island. These projects impact on

clearly identifiable groups of beneficiaries, and provide them with a standard of supply exceeding that generally available to all customers.

This raises the important question – if a step change benefits only a few consumers, should the costs for these improvements be borne by all consumers. The ECCSA is of the view that costs for such should be carried by the beneficiaries of the work, and there should not be a requirement for all consumers to pay for a benefit provided to a few consumers.

3. Forecast Operating Expenditure

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

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

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

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

Comparisons of actual opex compared to allowed opex for the vast majority of regulatory decisions show a typical trend of actual opex in the early years of the period featuring a discount to the allowed opex. With the approach of a new reset, the opex seems almost magically to increase and the forecast for the final year shows a need in excess of the regulator's allowance. The purpose of such a trend is clear – making savings in the early periods, allows the DB to retain all of the savings without risk of losing them in a new reset. Ramping up opex in the latter years provides the DB with the basis of an argument to claim a higher allowance in the new reset. This is regulatory gaming and the AER must be on top of this aspect.

The introduction of the EBSS is intended to provide an incentive to reduce opex, but by the AER declaring that it will use the fourth year opex as the basis for the new period, still retains the incentive on the DB to follow the historic approach so obvious in previous regulatory reviews. The concern

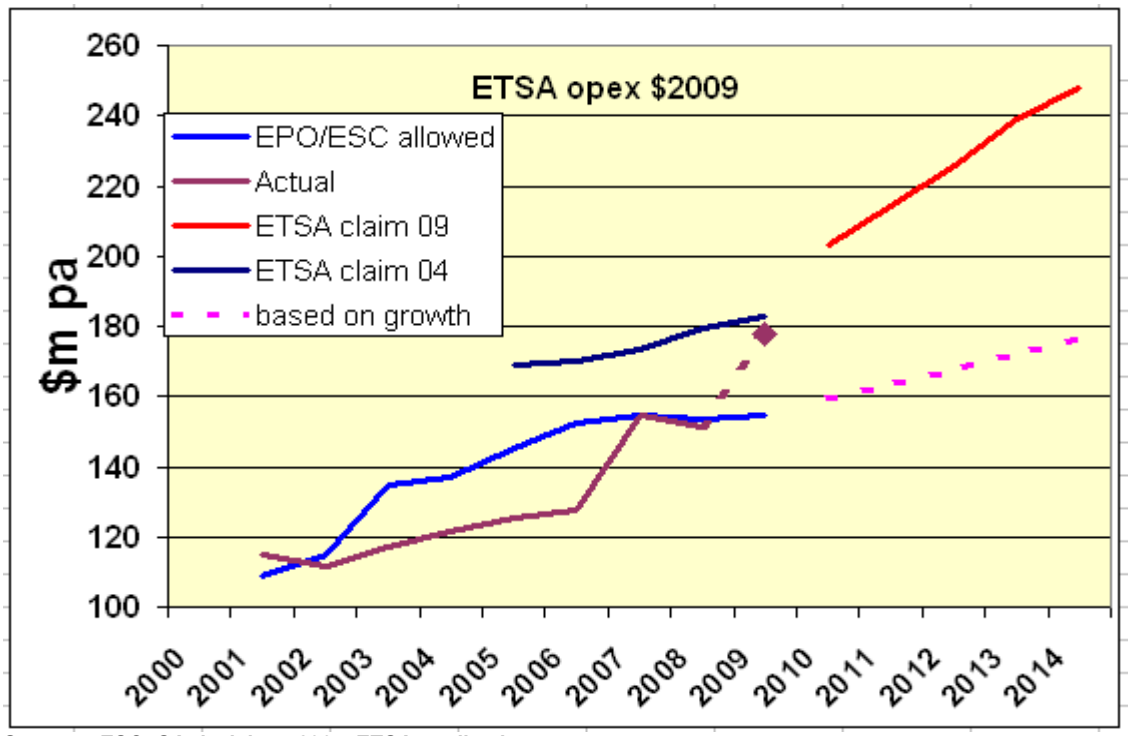
ECCSA has with this approach is that there is an incentive on the firm to follow the same practice as has been seen in previous approaches. Because of this the ECCSA has been a strong supporter of the opex over the previous period being averaged to provide the start point for the next period opex and allowing for step changes from that start point.

In the following analysis of ETSA opex the ECCSA shows a trend based on the 07/08 actual opex, extrapolated by the forecast growth in demand. The ECCSA does not necessarily consider that this approach is accurate, but provides an indication only. In fact, ECCSA considers that the growth in peak demand as the basis for setting opex will provide a significant overstatement of opex needs, as opex tends to be somewhat independent of demand growth.

3.1The ETSA opex claim

The following chart shows the historic EPO and ESCoSA allowances for opex along with ETSA actual opex, and the opex claimed by ETSA in 2004 for the current period. This is then extended to show the claimed controllable opex. However, as has been seen in analyses made with many other DBs, ETSA outperformed the regulatory allowances in the early years and only recently has its actual opex risen to the amount allowed by ESCoSA. The data for the final year must be treated with caution.

Included in the chart is the 08/09 actual opex extrapolated using the growth in peak demand forecast by ESIPC.



Sources: ESCoSA decisions 2004, ETSA application

Most telling in this analysis is that in 2004 ETSA claimed a significant increase in opex of some 45% above its actual opex for the 03/04 year and resulting from the ESCoSA review was allowed an increase of 25%. Yet its actual opex for the first year of the current period was only 8% above its 03/04 actual opex.

The ETSA application shows a very high start value for opex compared to the current ESCoSA allowance – in fact, ETSA would appear to be requesting a step increase in opex of some 35% - it is difficult to accept that ESCoSA would be in error to such an extent! ETSA compounds this high start value with a further overstatement of opex claim averaging some $12m pa (5.5% real) premium.

The ECCSA has a real concern that ETSA is attempting to game the system, the new Rules and the guidelines established by the AER. It is clear that it attempted to do likewise in 2004 and despite the best efforts of ESCoSA, ETSA was awarded considerably more opex than it has subsequently used. In fact, ETSA has been allowed to collect some $12m pa in unspent opex in the first four years of the current period.

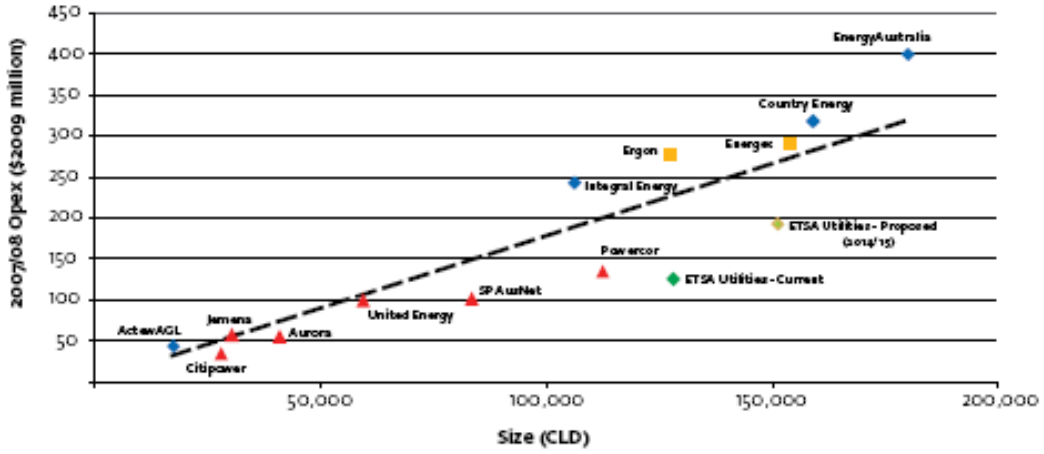
If ESCoSA had accepted the ETSA opex claim in 2004, then ETSA would have garnered some $35m pa for the first four years of the current period. This is equivalent to ETSA being given an extra year of opex which it would never have used.

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

There is clear evidence that in the past ETSA has grossly overstated its opex needs. With such "errors" in the past, it is clear that ETSA has some difficulty in estimating its needs, and as a result has been excessively conservative in developing its estimates for opex.

Despite underutilizing its allowed opex, ETSA provided the following chart as supporting its view that it is a low cost network service operator.

Figure 7.11: Comparative analysis of operating expenditure versus size



This purports to show that ETSA opex performance benchmark is good, as it is "below the line. ECCSA discussed this chart with its affiliate EMRF which was involved in the NSW distribution business review. EMRF pointed out that the AER decision to increase the NSW business opex allowance was a massive increase on that allowed by IPART at the previous review. If this chart was redrawn with IPART determined opex allowances, the ETSA performance would be seen as sitting "on the line" rather than below it.

This analysis implies that either the jurisdictional regulators (ESCoSA and IPART) were too harsh in their assessments of opex needs, or the AER was too lenient with the NSW businesses in their opex allowances. We consider that the latter is the case and the AER must not commit another regulatory error.

As ETSA was able to improve its reliability in the current period (see table 10.11 in ETSA application) but using less opex than ESCoSA allowed, there is a clear implication that the current level of opex actually used by ETSA is demonstrably efficient.

In the absence of clearly identified step changes, the AER must recognise that the actual ETSA performance in this period provides clear evidence of ETSA benchmark performance, and therefore the claimed opex by ETSA is excessive.

3.2 The relationship between capex and opex

As noted above, 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, ETSA proposes to increase its opex from current levels.

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

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

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

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

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

3.3 Forecasts of higher costs

ETSA has been guided in the development of its application by the recent AER decisions for SP AusNet in Victoria, Transend in Tasmania, ElectraNet in SA and the NSW DBs and transmission decisions. In these decisions the applicants have claimed that opex costs have shown a massive upward forecast trend in recent times.

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

This issue is addressed more fully in section 2.3 in the capex section of this response.

This shows that average wage growth in Australia has been relatively static since the start of the current decade.

In its report earlier this year to the AER[4], KPMG/Econtech points out that over the previous period the wages nationally in selected industries have moved (on average in the following way:

Table 2.3
National Average Real Wage Growth (% pa)

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

Source: LCM

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

In this regard, it is obvious from the ETSA actual opex that it was able to absorb within its structure and EGW labour cot real increase of 1.5% pa and still under-used the allowed opex which ESCoSA had increased specifically to accommodate the expected increase in wages. ESCoSA noted in its final decision (section 7.2.4.1):

> ***"Labour cost escalation***
> ETSA Utilities assumed in its expenditure submission that real labour costs (i.e. its nominal wage bill in constant price terms) would increase annually by an annual percentage amount that is consistent with historical rates of increase plus a small additional margin to allow for the tighter labour market conditions anticipated over the 2005-2010 regulatory period.
>
> The Commission accepted this view and allowed for an annual percentage increase in real labour costs based on ETSA Utilities' historical experience.
>
> The Commission estimated the annual percentage increase in ETSA Utilities' real unit labour costs by subtracting from the percentage rate of increase in real labour costs an annual percentage amount reflecting its views on the expected percentage increase in labour productivity over the 2005-2010 regulatory period.

[4] KPMG/Econtech Updated Labour Cost Growth Forecasts 25 March 2009, prepared for the Australian Energy Regulator

> The Commission assessed trends in labour productivity published by the Productivity Commission for the utilities sector and across all industries over a recent 30 year period. The analysis showed different expectations of future labour productivity could be drawn depending on the time frame chosen on which to base the decision.
>
> The data show increasing labour productivity in the utilities sector over the 1990s, after which labour productivity has declined. These trends reflect the dynamic structural changes in the utilities sector, particularly the impact on labour productivity before and after the corporatisation/privatisation process of the 1990s.109
>
> Given this, it is not reasonable to focus attention on any particular cycle to make judgments on expected labour productivity. That is, it is not reasonable to assume the high labour productivity growth of the 1990s, or alternatively, the negative growth of more recent years would continue into the future.
>
> The Commission based its expectation of labour productivity on the long term trend across all sectors of the Australian economy (which is approximately 2.2% per annum). This decision does not rely on specific periods of labour productivity increase or decline in the utilities sector, but assumes that labour productivity in the utilities sector will resemble the market average as the pace of structural reforms reduces.
>
> The Commission's decision provides for a real increase in ETSA Utilities' unit labour costs of 2.1% per year, reflecting the pressure on wages that might arise as a result of the high demand for skilled electrical workers across Australia. This amount includes the additional margin proposed by ETSA Utilities for the 2005-2010 regulatory period."

ESCoSA accepted the blandishments of ETSA in regard to the wages pressures but the actual performance of ETSA in regard to its opex, showed that ESCoSA made an allowance that probably was not warranted.

ETSA has effectively repeated its claim for additional funds to accommodate expected wage pressures in the EGW sector, yet the Econtech expectation for higher EGW wages in the next decade replicates the actual EGW wage growth during the current period. As ETSA was able to absorb such a real rate of growth in the current period, it should be able to repeat this in the next period.

The clear import of this analysis is that ETSA has been experiencing a premium of EGW wages growth over average wage growth that is typical over the long term and this premium is set to continue. Despite this premium

ETSA has been able to absorb the premium and still under spend is allowed opex. This clearly implies that there is no basis to allow any premium for expected wages growth over the coming period.

3.4 Identified step changes

In the current period, ESCoSA made provision for ETSA opex which covered (ESCoSA FD section 8.2.3):

Directly Attributed Costs
Approximately half of ETSA Utilities' total operating expenditure consisting of direct operating costs, which include:

- Network Maintenance and Inspections;
- Vegetation Management;
- Emergency Response; and
- Network Operating Costs.

New/Non-recurring Costs
These include costs relating to a number of new obligations imposed on ETSA Utilities. These obligations include:

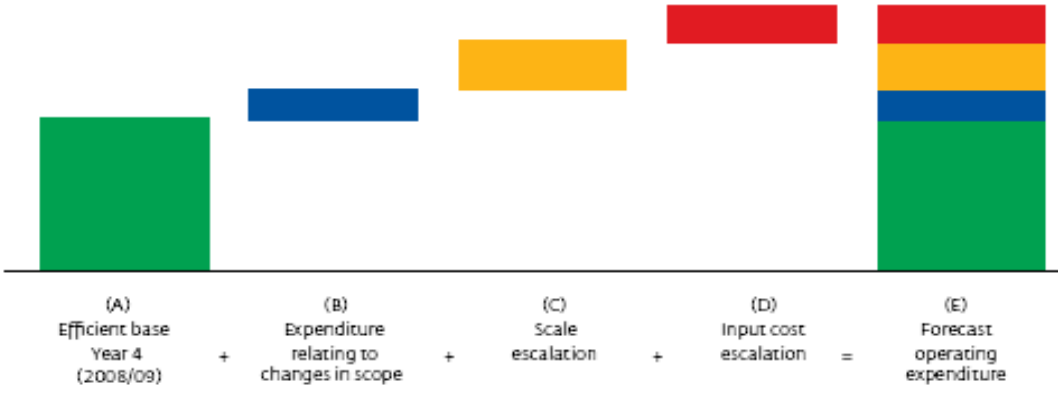
- FRC requirements (including provision of certain metering services):
- the installation and operation of an OMS (outage management system);
- administration of a GSL scheme; and
- obligations imposed by the Commission in relation to demand management.

Allocated overheads
Overheads that are allocated to the prescribed distribution business.

ESCoSA allowed for the costs associated with these within the current (under-utilised) opex allowance for the current period.

ETSA provides the following process for increasing its opex:

Figure 7.4: ETSA Utilities' process for forecasting operating expenditure



Here ETSA identifies three elements which cause the step change in its opex needs – scope changes, scale escalation and input cost escalation.

3.4.1 Scope changes

ETSA advises that it need to increase the base year for a number of adjustments which causes an understatement of the true opex needs. This is one of the reasons ECCSA does not consider that using a single year as the base year for opex benchmarking is legitimate.

ETSA has advised it needs to increase its opex due to the understating the base year opex and provides comments under the following headings:-

- Vegetation management – yet this was a matter recognised in the ESCoSA review, and although ETSA has sought regulation changes needed to allow it to carryout its vegetation management, the court case ETSA refers to was to prevent it doing what it considered was appropriate rather than increasing the requirements place on it. ETSA notes that this court case was introduced in 2008 and therefore the vegetation management program in the years before this was considered to be part of the ESCoSA efficient opex allowed. ETSA noted that as a result of the court case reduced its vegetation management program, and this may be the cause of the small decrease in opex for 08/09 compared to the previous year. This issue does not appear to be a step change
- Telecommunications – ETSA states a requirement to increase opex to allow it to communicate with its ever expanding workforce. This seems hardly a step change but part of normal operating a business such as ETSA's.
- Debt raising costs are allowed by the AER as legitimate providing they are not included in the WACC. ETSA alleges that its debt raining costs are to increase in the future, so it is strange that ETSA alleges that its base year opex is too low because of future dent raising costs. However whether this comprises a legitimate step change is moot, as the bulk of the debt held by ETSA is covered already in the ESCoSA opex allowance, and the only new element would be for the additional debt needed for the capex program. Renewal of debt for the existing element of the RAB is already included
- Self insurance – ESCoSA allowed for self insurance in the current allowance so this is not a step change. For ETSA to use a forecast of future self insurance costs as a reason to increase its base year costs seems inconsistent

- Expense of the application – ESCoSA allowed for the preparation of a reasonable regulatory application. It is ETSA's decision whether to spend more on a regulatory proposal in the anticipation of securing a better (more profitable) outcome from the regulator. There must be a point at which the regulator determines that excessive costs for a regulatory review are not allowed. This is not a step change but a desire for ETSA to get an increased revenue from the AER.
- Demand management – ESCoSA allowed funds to undertake studies into viable and financially efficient methods to implement demand management in the current proposal. If the AER determines that an enhanced DM program is appropriate then the additional cost would justify a step change.
- Finance adjustments – ETSA alleges that its opex for the base year understated one off payments.

ETSA includes some step changes as a result of the risk profile:

- Age and asset monitoring and condition inspection and maintenance – ETSA considers that its program for monitoring and maintenance warrants increased expenditure. ESCoSA made allowance for the OMS and other monitoring within the base allowance. There is an expectation that a competent NSP asset owner would maintain its assets through a soundly based program and as this issue was addressed in 2004 by ESCoSA it seems unlikely that the current allowance is insufficient, especially as ETSA underspent its opex allowance. There is no step change
- Maintenance planning and inspections – ETSA seems to imply that what it has done to date is insufficient in this regard. This is not borne out by the underspend and the improved reliability in the current period. This is not a step change
- Superannuation – It is accepted that as ETSA provides a defined benefit superannuation scheme, then the recent share market reversal would constitute a step change. However, as there was a significant benefit that ETSA received during the outperformance of the share market during 2005-2007, ETSA would have received a windfall and not required to add to the defined benefit scheme in those years. ESCoSA allowed for superannuation payments in its 2004 decision and therefore the only step change would be the net of the benefits ETSA accrued less the detriments of the share market fall in 2008. Such a change would be a "once off" adjustment and as there is already an allowance within the ESCoSA allowance superannuation payments are already included in the opex allowance. There is no need to add into the forecasts for more years like 2007-08 where extra additions were required to the super fund.

- Insurance – see comments earlier. If the costs for insurance are demonstrably higher then this constitutes a step change. However ETSA proposes that catastrophic incidents are to be addressed through a pas through arrangement. If this is the case and the current ESCoSA approach does not allow this, then there is an expectation that insurance costs should fall due to the lower risk.
- Land tax and enhanced meter maintenance – It appears that these are increased requirements since the last review and therefore are step changes
- Feed-in payments by ETSA – If ETSA becomes liable for costs associated with the feed-in tariffs, then this is a step change
- Opex from capex – ETSA claims that it will incur increase opex from its capex programs. Normally a capex program is all encompassing, and there should not be costs incurred in the opex budget. Equally, as noted above, capex should result in reducing opex but ETSA offers no rebate because of this. In fact ETSA claims an increase in opex purely because the size of the RAB increases. Capex programs are a normal part of the business of an NSP, so this element should not be considered a step change
- New IT systems do include for various continuing costs such as licence fees. Equally there will be surrender of other licences resulting in savings. Only the net cost should be claimed as a step change
- Property – ETSA notes that it will incur increased continuing costs as a result of additional property it acquires, whether by purchase or lease. Additional property costs are a step change
- Community expectations – The community is ETSA's customer and serving a customer is part of business. Other than providing the service contracted for, the community expectations have not increased, although ETSA's perceptions as to what a customer expects might have changed. As the community expectations have not changed this is not a step change whether this refers to outage notifications or surveys to identify what ETSA needs to do to meet the community expectations
- FRC – This aspect has already been incorporated into the ETSA opex by pass through in the current period. It is not a step change
- Aerial inspections – ETSA has always been expected to carryout whatever inspection is deemed needed within its opex budget. This is not a step change imposed on ETSA
- Davenport training centre – The fact that ETSA has decided to establish its own training facility may be advantageous but under its current training the cost of providing facilities is already included. The cost increase caused by the new facility should be more than offset by savings in the current budget. This is not a step change but a redirection of funds.

3.4.2 Scale escalation

There is no doubt that a larger organisation will incur more cost to operate than a smaller operation. In the case of ETSA, the key is to determine what is the size and growth of the operation, and whether this growth is more than the growth of revenue that comes from the provision of the services.

ETSA makes reference to the AER decision relating to ElectraNet where the AER made allowance in opex for the scale of operations increasing. In this regard, whereas ElectraNet operates under a revenue cap approach, it must be remembered that ETSA is to operate under a price cap approach and therefore there is implicitly an allowance for growth in revenue as a result of growth in consumption and peak demand. Under the revenue cap approach, this does not apply. This immediately highlights that ETSA should not be entitled to a scale escalation of its opex, as this element is implicitly included by the price cap approach.

ETSA notes there are four drivers of their scale escalation:

- Growth in the size of the network
- Growth in the volume of capital and maintenance work
- Growth in customer numbers
- Growth in the size of the workforce

Network growth

ETSA uses the current value of its assets as the basis of calculation of its network growth. This immediately introduces a distortion.

Example 1
If a network extension comprised the augmentation of an existing substation this augmentation could be achieved in two basic ways – replacement of the existing transformers with larger transformers or adding an additional transformer.

In the first instance, there is effectively no new opex required as there is no change in asset numbers. The marginal increase in opex due to the larger sized asset would be offset by reduced opex as the asset is newer and therefore require less maintenance.

In the second instance, an additional transformer would increase the amount of opex but again only marginally, as maintenance on all transformers would be concurrent.

Either way, the only reason the increased capacity is required is because of an increase in demand and/or consumption and the price cap approach provides added revenue to cover the additional opex.

The increase in capital needed for the augmentation is either provided by the causer of the increased demand (capital contribution) or from the ETSA capex program. ETSA receives a return on the increased capital so the only additional cost that ETSA incurs as a result of the augmentation is any increased opex. This increased opex is paid for from the increased revenue coming from the price cap revenue increase.

If there is no increase in demand or consumption (and hence no increase in revenue) then the augmentation is not required.

Example 2
A substation requires refurbishment. ETSA removes the old transformers and replaces them with new transformers of the same size. The amount of opex should reduce as the new transformers will require less maintenance than those at the end of their life.

Suppose the new transformers cost more than the undepreciated value of the old transformers removed (and ETSA considers this will be the case as it seeks a cost escalation on materials under its capex program). Notionally the size of the network increases using the ETSA approach.

There is no increase in revenue as the work was not due to increased demand or consumption. ETSA increases the size of its RAB as actual capex incurred is rolled into the RAB. ETSA receives a return on the value of the new transformers as part of its return on capital. There is probably a decrease in opex due to the newness of the asset, yet under the ETSA approach, because its asset base has increased relatively, ETSA considers it is entitled to an **increase** in opex.

There is no increase in opex just because an asset was replaced.

Example 3
A new subdivision opens, or a new factory is built. This would require a new substation and new wires connecting the new point of demand to the existing shared network. Because there is a new source of consumption and demand, ETSA revenue increases under the price cap approach.

The cost of the capital is recovered by a combination of capital contributions and a return on the capital ETSA provides. ETSA does

increase its opex because the number of assets has increased. The question then becomes does the increase in revenue from the added demand and consumption match the increase in opex required for the new facilities.

ECCSA members advise that what ETSA does in this circumstance is to assess the added revenue it will get from the new facility, and subtract the costs it incurs as a result of the new facility, both in relation to opex and capex. It then sets the capital contribution based on the difference between the increased revenue and the costs.

The added opex ETSA requires is recovered from the capital contribution and the increased revenue.

These examples show that ETSA is not exposed to an increase in opex due to the growth of the network as the price cap approach and the ETSA approach to capital contributions allows ETSA to recover any added opex costs due to network growth.

Growth in capex and maintenance

As noted above, the increase in opex due to network growth is recovered under the price cap approach and ETSA policies for capital contributions. As part of its assessments and tariff build up, ETSA should recover all of the added costs due to maintenance within these two parameters.

There is an expectation that added administrative costs might be incurred as part of an enhanced capex program. However, many of these costs are embedded in the capex program and to include them in the opex allowance is akin to double counting.

ETSA has in the current period been exposed to a larger increase in peak demand and consumption than ESIPC forecasts for the next period. Despite this growth, ETSA was able to spend less on capex and opex than it was allowed by ESCoSA. Therefore, implicitly ETSA has demonstrated the ability to manage its current capex and maintenance programs with its current opex allowance.

Using the monetary size of the capex program as the basis for increasing opex introduces significant distortions.

For example, the same project team will be able to administer a capital project of widely differing capital costs. Its ability to manage a project and the administrative support needed varies little with project value.

Nearly half of the capex program is related to growth and therefore the price cap and capital contribution approach to revenue generation should accommodate the increases in costs resulting from growth.

The current allowance for opex covers the administrative elements of the capex programs for replacement and reliability as these have been a constant aspect of the ETSA capex program in the current period.

When examined in detail, the ETSA claim for increased opex due to managing the expanded capex program, it can be seen that most of the costs are covered by the capex budget, the increased revenue or the existing opex budget. Therefore no increase is warranted.

Customer growth

Increases in customer growth result in new demand and consumption. ETSA increases its revenue under the price cap approach for increased demand and consumption. Implicitly, the price cap approach therefore reimburses ETSA for increases in customer numbers.

Workforce growth

There are increased costs associated with an increase numbers of employees. This raises the question as to whether the increase in employee numbers is a result of increased demand and consumption, or for other reasons.

ETSA points out that it has made the decision to outsource significant parts of its operations. This would reduce the numbers of direct employees.

ETSA notes that its planned capex and opex programs will increase its current workforce and provided a projection that employee numbers will increase by some 4-5% pa over the next period. This is less than the actual growth of employee numbers for the current period which was 6-7% pa. Despite this growth, ETSA was still able to underspend its opex budget until recently, and this implies that ETSA has been able to manage the ancillary costs associated with increasing employee numbers within its current benchmark opex budget,

The ECCSA is not convinced that there is a need for the AER to allow ETSA to further increase its opex budget for a change in scale of the operations above the implicit increase in the scale in opex that is inherent in the price cap approach.

3.4.3 Cost escalation

As noted above in sections 2.3 and 3.3 ECCSA does not consider labour cost escalation is needed in the case of the ETSA opex budget.

3.5 Summary of the ECCSA view on ETSA opex

ETSA has requested a large increase in its allowed opex budget. It alleges that this is needed for a variety of reasons, ranging from a need to accommodate the growth of the network through to escalators needed due to the size of the network.

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

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

ETSA also argues that its benchmark opex (ie that for year 08/09 was impacted by exogenous factors and as a result saw the ETSA opex fall from the previous year. The ECCSA recognises this is the case and has long been a supporter of using average opex over the entire current period as the basis for setting the benchmark. If such an approach was used, then the benchmark would be even lower than the 08/09 year as ETSA was able to significantly under-run it's allowed opex for many years prior to the current year, and was allowed to keep the benefit of this under-run. The AER must recognize this common aspect of regulatory gaming by regulated networks.

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

4. Service Performance Targets

4.1 Overview

ETSA has been exposed to a service performance target incentive scheme under the ESCoSA regulation. This was based on a regional approach rather than the AER preferred SCoNRRR approach. Under the current scheme ETSA has achieved the following reliability performance

Table 2.5: ETSA Utilities' Reliability Performance 2005/06 – 2007/08

REGION	SAIDI (MINUTES)				SAIFI (NUMBER OF INTERRUPTIONS)				CAIDI (MINUTES)(1)			
	Target	05/06 Performance	06/07 Performance	07/08 Performance	Target	05/06 Performance	06/07 Performance	07/08 Performance	Implied Target	05/06 Performance	06/07 Performance	07/08 Performance
Adelaide Business Area	25	10	7	16.3	0.30	0.20	0.08	0.13	80	53	88	125
Major Metropolitan Areas	115	143	118	109	1.40	1.61	1.47	1.23	82	89	80	89
Central	240	239	267	202.2	2.10	1.64	2.02	1.49	115	146	132	136
Eastern Hills/Fleurieu Peninsula	350	414	381	252.4	3.30	3.72	2.59	2.39	105	111	147	106
Upper North & Eyre Peninsula	370	610	481	360.7	2.50	3.31	2.30	1.99	150	184	209	181
South East	330	256	489	327.5	2.70	2.36	3.78	2.6	120	109	129	124
Kangaroo Island	450	1,354	510	564.9	n/a	9.34	7.33	7.85	n/a	145	70	72
Total Network(2)	**165**	**199**	**184**	**150.1**	**1.70**	**1.85**	**1.75**	**1.45**	**97**	**107**	**105**	**104**

(1) While the Electricity Distribution Code does not include an explicit standard for CAIDI, it does include a best endeavours standard for time to restore supply to a specified proportion of customers affected by an interruption. The CAIDI "target" is the ratio of the SAIDI and SAIFI targets for each region.

(2) There is no explicit SAIDI or SAIFI target for the Total Network. The figures quoted here are taken from Part A of the EDPD and reflect average performance of the Total Network for 2000/01 to 2003/04.

Table 2.6: ETSA Utilities' Time to Restore Supply performance against service standard targets 2005/06 – 2007/08

REGION	TARGET (% OF CUSTOMERS)	PERFORMANCE (% OF CUSTOMERS)		
		2005/06	2006/07	2007/08
Adelaide Business Area	90% within 2 hours 95% within 3 hours	92% within 2 hours 100% within 3 hours	89% within 2 hours 99% within 3 hours	37% within 2 hours[21] 100% within 3 hours
Major Metropolitan Areas	80% within 2 hours 90% within 3 hours	78% within 2 hours 92% within 3 hours	83% within 2 hours 94% within 3 hours	81% within 2 hours 94% within 3 hours
Central	80% within 3 hours 90% within 5 hours	77% within 3 hours 92% within 5 hours	77% within 3 hours 91% within 5 hours	75% within 3 hours 92% within 5 hours
Eastern Hills/Fleurieu Peninsula	80% within 3 hours 90% within 4 hours	90% within 3 hours 93% within 4 hours	75% within 3 hours 83% within 4 hours	83% within 3 hours 92% within 4 hours
Upper North/Eyre Peninsula	80% within 4 hours 90% within 6 hours	77% within 4 hours 89% within 6 hours	79% within 4 hours 83% within 6 hours	77% within 4 hours 87% within 6 hours
South East	80% within 4 hours 90% within 5 hours	92% within 4 hours 94% within 5 hours	88% within 4 hours 96% within 5 hours	90% within 4 hours 94% within 5 hours

Source: ESCoSA SOUTH AUSTRALIAN ELECTRICITY DISTRIBUTION SERVICE STANDARDS: 2010-2015 FINAL DECISION **November 2008, page 25**

ESCoSA has determined that ETSA will be requited to meet these standards of reliability for the 2010-2015 regulatory period. ETSA is also

required to provide the same data to ESCoSA based on the SCoNRRR basis used by the AER in its STPIS, but its performance will not be measured using the SCoNRRR approach. The ESCoSA provides considerable explanation as to why it prefers to set ETSA performance on the regional approach.

The ECCSA is concerned that with a difference between the ESCoSA requirement and the AER incentivized approach, there is potential for ETSA to game the incentive scheme.

It is not clear now whether the ESCoSA set reliability settings are the minimum to be achieved, a target or to be the basis of an incentive scheme, as applied under ESCoSA regulation. The outcome of what is the basis for the ESCoSA set points for reliability has a great impact on the shape of the AER STPIS.

If the ESCoSA settings are a minimum then the AER has to set the performance target at a more onerous level, else the minimum performance will not be achieved. If they are a target, the ECCSA is unsure what the penalty will be on ETSA for not achieving these levels and effectively what role ESCoSA has in this area.

4.2 An observation of jurisdictional involvement

It is unlikely that ESCoSA should be setting the levels as the basis for an incentive scheme as it has decided on using measures which the AER has flagged as not being its preferred approach (regional vs SCoNRRR), and ESCoSA does not have the power to set reliability levels commensurate with the opex and capex allowances made for the period.

It is noted that ETSA has already been subject to some reliability and performance standards for its operations under ESCoSA regulation. At that time, ESCoSA was able to assess both the reliability settings and the capex and opex deemed appropriate to achieve these settings. ESCoSA has now determined what the jurisdictional settings for reliability are to be, but this has been carried out in isolation of what the AER might determine for the allowable revenue. It is easy for a jurisdiction to set very high performance standards in the secure knowledge that it will not be held to account for the costs of achieving the outcomes of its directions, and equally the jurisdiction could set reliability levels which are easily achieved with a large revenue allowance made by the AER.

What has been absent in setting performance standards is a risk analysis, and a comparison of the risks against the costs involved.

In South Australia, the Electricity Supply Industry Panning Council (an independent body established by the SA government states in regard to the ElectraNet review undertaken by the AER in 2007,

> **"LIMITATIONS ON THE PLANNING COUNCIL'S REVIEW**
>
> The work of the Planning Council has focussed on only part of the capital investment program in ElectraNet's revenue proposal. The review has covered the investment in major projects associated with network augmentation to reliably meet future demand. It is important to note that in reviewing the capital program, the Planning Council has not assessed, nor is it in a position to assess, the appropriateness of the quantum of costs associated with each project. The Planning Council understands that the cost estimates used by ElectraNet will be the subject of review by the AER's consultants."

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

Despite this, ESCoSA undertook a review of the willingness to pay for increases in reliability[5]. This found that in SA there was not a general willingness to pay for increased reliability. With this in mind ESCoSA did not and has not since, increased the reliability standards in SA.

The AER should take note of this survey and report in its evaluation of service standards and in its evaluation of the proposed ETSA capex program.

4.3 The STPIS

A STPIS is the way that the regulatory bargain can be balanced. Consumers increase the revenue allowed the regulated business in return for improved performance. The regulator is tasked with ensuring the benefits of the increased allowances for capex and opex are translated into a performance level that consumers would see is appropriate for the service provided.

ETSA has converted the regional performance assessed by ESCoSA into a SCoNRRR approach in table 10.11 to provide historical and a target for a STPIS to apply. This needs to be verified.

The settings in a STPIS should not result in an automatic payment of a bonus. In the absence of any attempt by an NSP, there should be no bonus payment made, and the value of increased capex and opex must be

[5] KPMG Consumer Preferences for Electricity Service Standards, September 2003

included to ensure that consumers do not pay twice for improved service – once by paying large capex and opex allowances and the second time by paying a bonus for achieving the benefits resulting from the increased revenue.

In Table 10.10 ETSA professes to indicate the penalty/bonus that would apply under its proposed targets yet there appears to be inconsistency of the historical performance between the tables 10.10 ad 10.11. This needs to be rationalized so that it is clear what is proposed to be a target and the historical outcomes that would result.

Table 10.11 seems to indicate that ETSA has set the indicative targets such that it would show an out performance get a bonus for 2 measures for every one where it under performed. Particularly its performance in the latest full year, showed that in every measure it would have out performed the target.

Table 10.11: Indicative STPIS Reliability targets

Reliability Targets	2005/06	2006/07	2007/08	Indicative target (average)
CBD				
SAIDI	23.5	20.8	20.9	21.7
SAIFI	0.216	0.270	0.213	0.233
Urban				
SAIDI	124.6	97.0	90.5	104.1
SAIFI	1.515	1.299	1.143	1.319
Rural Short				
SAIDI	172.4	225.5	143.7	180.5
SAIFI	2.135	1.969	1.519	1.874
Rural long				
SAIDI	269.6	322.1	260.2	284.0
SAIFI	2.014	2.459	1.958	2.144

The ECCSA considers that ETSA has proposed to use settings which are readily achieved (considering that all settings were achieved in the last year) and with the inclusion of the capex and opex allowances proposed, the settings should be well above the expectations resulting from the large expenditure of funds proposed. As noted above, the settings should be challenging to achieve so that the earned bonus really does result from serious attention by ETSA.

The ECCSA considers the indicative targets should be at least 10% lower than requested by ETSA so that there is a reward for significant investment

of effort by ETSA, and that avoiding a penalty can be achieved with little effort.

5. Cost of capital and allowed revenue

5.1 WACC

As ETSA notes, this is the first time the AER will be carrying out a distribution reset review where the development of the WACC for the reset follows the requirements of the revised Chapter 6 Rules. The AER is permitted under the Rules to vary the input parameters from those established each five years for transmission, but clearly the AER must have regard for the work carried out in developing the parameters in the WACC review recently concluded.

ETSA has identified two parameters where they consider the WACC review did not deliver outcomes appropriate for their needs – the market risk premium and gamma. ETSA provides more academic analysis indicating that MRP should be set at 8% (up from the traditionally used 6% and the AER set 6.5%) and a value for gamma of 0.5 (a return to the previously used value, down from the AER decision of 0.65). ETSA did not decide to query whether a higher level of equity beat should be used.

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

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

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

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

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

5.1.1 Market risk premium

In relation to the value of the MRP, the AER made it quite clear that their decision to increase MRP from the traditional level of 6% to 6.5% was a directly attributed to the impact of the current global economic conditions. Indeed, in both its Issues Paper and draft decision, the AER had

consistently contended that an MRP of 6% was appropriate. In the period between the issuing of the draft decision and the delayed release of the final decision in May 2009, the AER took recognizance of the impact of the global outlook, and made this quite clear in its final decision. What was not considered by the AER at the time was the impact of the GFC on the risk free rate.

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

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

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

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

In its attachment J.1, ETSA's consultant CEG draws the conclusion that based on historical government debt yields and the current state of the economy, the MRP is higher than the value set by the AER.

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

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

If the AER is persuaded that there is a need to re-address the value of MRP in light of the very recent changes[6] it also needs to assess the expectation of increases in the value of the risk free rate as a result of the heavy government borrowings. These heavy borrowings will increase risk.

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

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

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

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

[6] For example CEG suggests that the market is now more risky and needs a higher MRP to reflect this risk

5.1.2 Equity beta

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

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

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

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

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

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

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

5.1.3 Gamma

ETSA provides a consultant report indicating that gamma should be set to the historical level of 0.5, rather than use the AER determined value of 0.65 reached after the WACC review.

ETSA provides two papers professing to provide new evidence that the AER decision on gamma is incorrect:-

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

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

5.1.4 Conservatism in the parameters

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

- "Agree[d] that the AER should take a 'holistic' approach in its WACC built-up and to also reflect the risk reduction approach applying to the electricity network industry, such as the pro-industry rules applying to proposals for capital expenditures (as part of the AEMC's concept of incentive regulation), non-optimisation of the regulatory asset base, automatic indexation of assets, etc.
- Note[d] that the AER has deliberately incorporated conservatism into its draft decision, but does not quantify its magnitude. Our analysis suggests that an additional premium of over 20% has been added to the market premium above the risk free rate, based on the use of factors including:
    - Reduced level of gearing
    - Inflated gamma used in the market risk premium

- Excluding the "Tech Boom" in isolation of the many other exogenous impacts which act to increase the equity beta
- Adopting lower credit rating, even though two thirds of network businesses are government-owned and have higher credit ratings than privately-owned businesses, as well as including gas network businesses, which have higher weather dependent risks.
- Treatment of tax imputation available, despite the extent of government ownership of the network businesses."

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

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

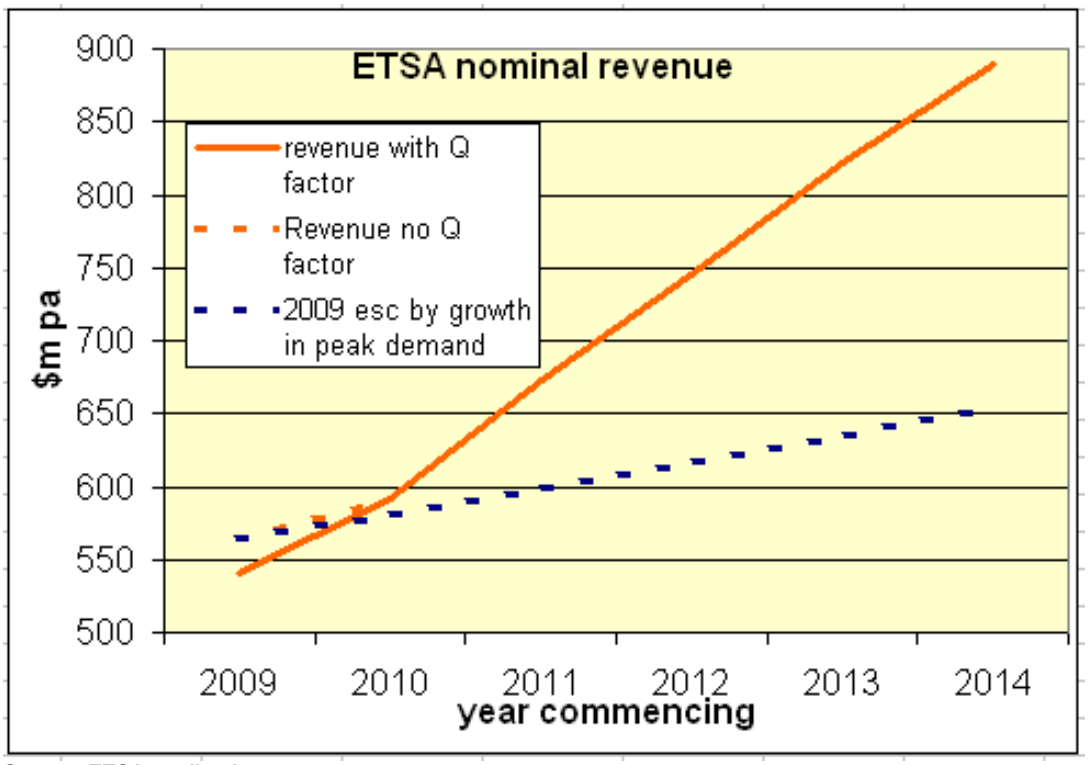
If the AER is of the view that there is "persuasive evidence" to change the WACC parameters based on the ETSA application, it should re-open other WACC parameters as these also might have varied as a result of the global financial crisis.

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

5.2 Revenue allowed and the impact on consumers

The ETSA claim has its revenue increasing at a very high rate.

It also notes that the initial step increase is aggravated by the 09/10 year having to be adjusted for its over-recovery in revenue due to consumption increasing faster than was allowed for in the ESCoSA decision in 2004. ETSA notes that as a result of its Q-factor adjustment there is a downward movement of the first year revenue, causing an increase in the step increase in revenue. This adjustment is shown graphically in the following chart by a dotted line at the start of the next period.



Source: ETSA application

ETSA has proposed a major increase in the cost of its services, commencing with an initial 10% real step change followed by 10% real increases every year thereafter. The graph also shows what the revenue would be based on the current revenue escalated by the growth in peak demand as identified by ESIPC. There is a stark difference between the ETSA claim and revenue based on growth.

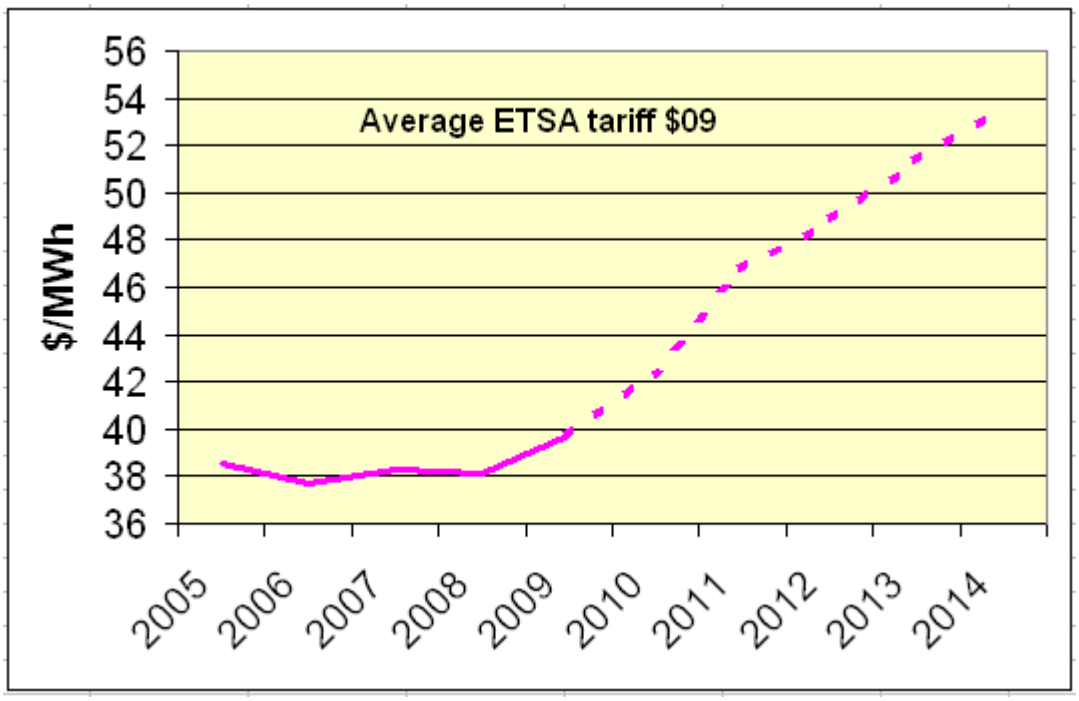
The ECCSA is very concerned that the ETSA application will result in such large increases in tariffs. Already, SA consumers are exposed to:-

- Rapidly increasing generation costs to accommodate the exercise of market power by AGL/TIPS which has resulted in annual average spot prices (and following from these contract prices) doubling from an average of $43/MWh experienced in 2004-2006 in2008 and even more for the first half of 2009.
- The impact of the expanded MRET scheme, and the incipient imposition of CPRS
- Transmission cost increases of >50% resulting from the AER decision on ElectraNet charges

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

having to be made by a lesser number of consumers connected to the networks.

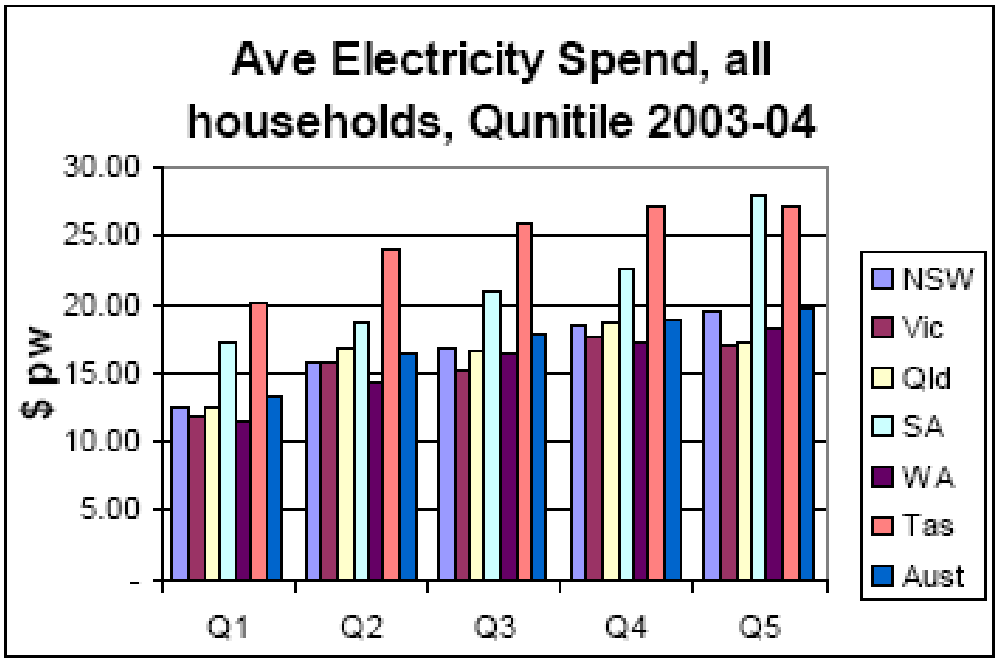
The following chart plots the current average tariffs for electricity distribution based on the ESCoSA decision in 2004 and uses the ESIPC actual and forecast consumption. As can be seen the ESCoSA decision has resulted in an average tariff of about $38-40/MWh whereas the ETSA application has the average tariff rising by more than 40% over the next five years.



The ECCSA is of the view that such tariff rises are not only excessive but also unnecessary. They will result in considerable hardship to many SA electricity consumers.

SACoSS in its report "Cost of Living Biannual Update No. 1" issued in July 2009 notes that already under the existing ETSA revenue charges, SA residential consumers pay more for electricity than those in every state other than Tasmania, and more than every other state for the highest quintile of income.

Figure 6: Electricity Expenditure by State, Quintile
(ABS, 2005)



But more alarming, is that the lowest income quintile of residential consumers in SA pay some 8% of their disposable income on electricity supplies – and this is before the price rises still to come, noted above. SACoSS goes on to note that of the poorest 30% of households identify that paying their electricity charges is the second most common cause of financial stress (SACoSS figure 8). It is pertinent to note that the lower income quintile households have a greater proportion of elderly and young families than those in the higher quintile ranges. At the same time these are the households which use their residences during the daytime when power demands are at their highest.

In a private communication to the chair of ECCSA relating to the MEU presentation to the AER forum on 6 August, UnitingCare Wesley Adelaide (UCW) observes:

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

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

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

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

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

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

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

5.3 Pass through events

In its last decision ESCoSA allowed ETSA the following pass through events which would allow ETSA to increases its costs (ESCoSA final decision page 203)

> ***13.8 Pass-through events for the Price Determination***
> The list of pass-through events for the purposes of the 2005-2010 Price Determination will therefore be as follows:
> - change in taxes events;
> - service standards events;
> - regulatory reset events;

- extraordinary events;
- major projects events;
- 66kV undergrounding events; and
- retailer of last resort events.

As well as the pass through events included in the Rules, ETSA seeks the following events to be included in the list for pass through to be allowed.

- **an extraordinary event**—retaining the definition adopted by ESCoSA, to provide for abnormal events that are unforeseen or could not reasonably be guarded against;
- **a connection point project event**—in relation to transmission-related projects at metropolitan connection points, with a similar definition to that adopted by ESCoSA in its previous distribution determination;
- **a feed in tariff event**—to provide for the recovery of payments associated with ETSA Utilities' obligation to recompense customers for electricity supplied into the grid by solar panels installed at the customers' sites, to the extent that those payments differ from the estimated amounts provided for in ETSA Utilities' distribution determination;
- **an industry standards change event**—to allow ETSA Utilities to implement improved understanding about prudent practices, arising from court or Government decisions;
- **a retailer failure event**—to recover lost revenue resulting from a retailer going into administration, liquidation, or otherwise losing their licence;
- **a native title event**—reflecting ETSA Utilities' current involvement in a number of native title claims, the outcome of which is uncertain, and the potential for future claims; and
- **an interim period event**—allowing for occurrences that would be pass through events if they occurred before the commencement of the regulatory control period.

ETSA considers that the following events would constitute pass through events under the Rules

- ETSA Utilities may be required to roll out smart meters, and/or peak demand management equipment, although it is not currently subject to such a requirement;
- ETSA Utilities may be affected by the introduction of an emissions trading scheme by the Federal or South Australian Government;
- ETSA Utilities may be required to place 66kV powerlines underground, either because the Technical Regulator does not grant an exemption under the *Electricity (General) Regulations 1997* from the requirements

of the *Electricity Act 1996* for overhead clearances, or the Development Assessment Commission refuses consent for overhead power lines.

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

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

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

Some of the new pass through events sought by ETSA were already included in the ESCoSA review of 2004, and to eliminate them would constitute a step change for opex and capex needs. Others are effectively included in the WACC as part of the risk involved with operating a commercial enterprise, and some will be addressed as part of the acceptance of actual capex at the next review where actual capex in rolled into the RAB.

The main concern that ECCSA has is that ETSA has requested large increases in both opex and capex. A pass through event allows ETSA to increase the capex and opex allowances. Already there is concern that ETSA will not use the increases in either to the full amount claimed, and allowing pass through events to further increase these allowances will only increase the overall benefit ETSA will accrue.

The ECCSA considers that ETSA should be required to absorb the costs of all pass through events until the current capex and opex allowances are exceeded, and then for new pass through events to be considered on their merits, with the potential that the AER might allow the costs to be added to the allowed revenue. This approach has the benefit of imposing constraints on ETSA for seeking pass through events to be allowed into their revenue rather than encouraging ETSA to seek for every avenue to increase revenue

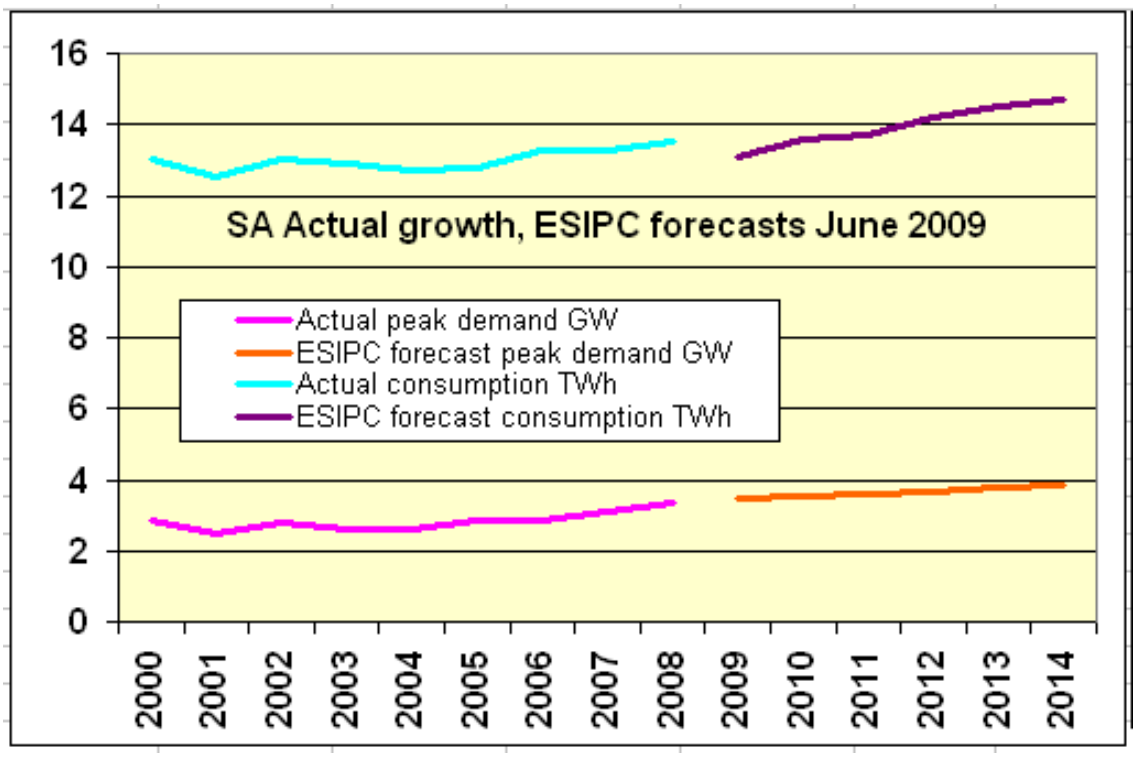
under this provision, and avoids the imposition of a materiality test or bright line approach until the available capex and opex is used. At this point a bright line approach is preferred to ensure the issue being addressed is material.

6. Demand and consumption forecasts

ETSA has used NIEIR forecasts as the basis for its expected growth in consumption and peak demand.

ESIPC has carried out a similar exercise (released one month later than the NIEIR report done for ETSA) yet there seems to be some inconsistency between the two reports, with NIEIR showing higher forecast growth than ESIPC. The ESIPC report is fully independent of ETSA whereas NIEIR carried out the work at the request of ETSA and therefore must be considered to be less independent than that of ESIPC. ECCSA has used the forecasts of ESIPC in its analysis.

The ESIPC analysis shows that forecast growth in peak demand (the main driver of the need for capex the new period will be less than in the current period.



This shows that for the last 9 years, peak demand rose by 2.9% pa and consumption rose by 0.8% pa. ESIPC forecast that over the next regulatory period, peak demand will rise by 2.6% pa and consumption to rise by 1.5% pa.

By contrast ETSA has stated it expects over the next regulatory period, peak demand to increase by over 3% pa and for consumption to fall by 1% pa over the period.

The implications of the mismatch between ETSA and ESIPC forecasts is that based on the ETSA forecasts

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

6.1 Gaming the regulator using forecasts

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

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

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

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

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

Notwithstanding this the ECCSA has identified a trend amongst electricity networks using a price cap approach, to overstate the growth in new connections and in demand (MW) as this adds justification to their claims for capex. Countering this, the networks tend to understate the growth in consumption (MWh) as this amount is used in the denominator of the price cap and tariff calculation. We would therefore counsel the AER and its consultants to closely examine past applications and forecasts to identify any trends in under- or over-forecasting which has led to acceptance of increased capex claims or to gaming tariffs by under estimating forecast usage.

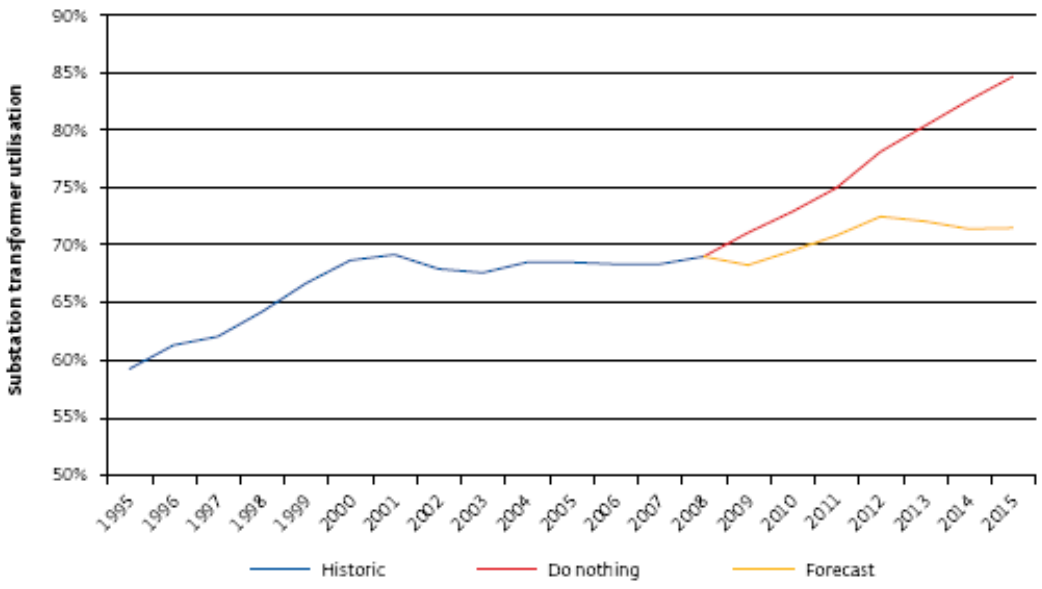
The ECCSA suggests that the AER should evaluate the revenue actually received by ETSA over the past period to assess where the actual revenue varied between the different sources of the revenue. For example, in the review of the Victorian electricity network businesses in 2005, ESCV identified that the DBs made a significant over-recovery in revenue due to the prices used in the tariff build up being overstated due to a lower estimate of consumption being built into the development of tariffs[7]. Because of this ESCoSA decided in its reset in 2004, to allow for an adjustment of the final allowed revenue (the Q factor) to minimise the impact of any gaming of the forecast consumption figures during the review process.

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

6.2 Utilisation of assets

In its application, ETSA in figure 6.8 points out that much of the need for augmentation arises from a utilisation factor that is approaching its maximum level.

Fig 6.8: ETSA Utilities' substation transformer utilisation



[7] The ESCV also identified that the businesses had recovered unplanned revenue due to under spending in both capex and opex.

The graph implies that during the current period where growth was higher than forecast in the next period, ETSA was able to maintain a constant utilisation rate with less than the capex allowed by ESCoSA.

The graph also implies that the additional load on the transformers will increase at the rate of 2-3% pa. In contrast, the ESIPC forecasts for both peak demand and consumption do not increase at this rate, throwing some doubt on the claim by ETSA that its transformer utilisation is approaching unacceptable levels, and therefore requires capex just to hold the current rate of utilisation.

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

7. Pricing Methodology

In the recent decision underpinning Chapter 6 of the NER, the MCE has accepted the principle that distribution pricing is more a matter for users of the transmission network than for the DNSPs, although it is accepted that under a price cap pricing approach, the DBs are incentivised to increase demand and consumption as by doing so they will increase their revenue.

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

7.1 A shared network: the underlying principles

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

Consumers see distribution pricing as an essential element of the AER regulatory reviews of DBs. Pricing is the allocation of the revenue streams into clearly identifiable elements so that consumers can readily see that the allocation of the permitted revenue is equitably allocated between all consumers representing the share of the cost of the provision of the transmission network. The outcome of this approach provides for all consumers to see that they each pay their equitable share of the jointly used assets. It also provides certainty that decisions made by each user (such as location, time of and frequency of use, and overall demand placed on the network) are adequately recognised by the user, and that no one user is effectively supporting less rational decisions by another user.

Inappropriate pricing of services leads to inefficient outcomes. A user that is convinced that it is paying too much for the service will take a number of actions to reduce its costs, perhaps leading to nationally inefficient outcomes. The user that is not paying its fair share for the service undervalues it and makes inappropriate use of the facility. Over allocation of distribution costs can lead to companies deciding to relocate overseas or close down, causing remaining users to provide that contribution from the

business ceasing its operations. Equally, under allocation of costs results in the proliferation of occasional users who do not recognise that impact of the decisions they are making.

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

7.2 The ETSA approach

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

The AER needs to ensure that the tariffs ETSA develops are as close as possible to cost reflectivity as possible, and that gaming of the tariffs is minimised. The ECCSA supports the ESCoSA approach to limiting the incentive for gaming of tariffs which was achieved by the application of the Q factor approach. The ECCSA recommends to the AER that a similar approach has merit and should be seriously contemplated by the AER for implementation.

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

The ECCSA recommends that the AER either require ETSA to establish tariffs encouraging the use of remote controlling of such loads, or to develop tariffs which recognise the true cost of providing a service which is used heavily but for relatively short periods of time, such as by uncontrolled refrigerative air conditioning.

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