Energy Consumers Coalition of South Australia

Australian Energy Regulator

SA Electricity Transmission Revenue Reset

ElectraNet SA Application

A response

by

The Energy Consumers Coalition of SA

August 2012

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The views expressed in this document do not necessarily reflect the views of the Consumer Advocacy Panel or the Australian Energy Market Commission.

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

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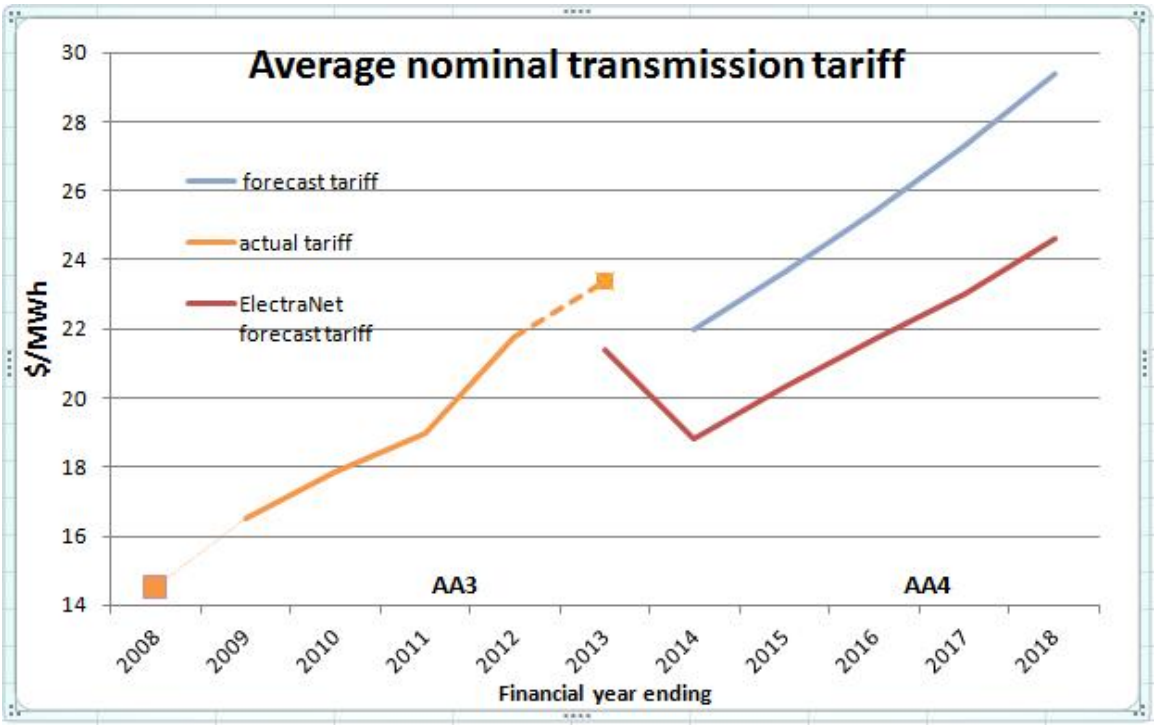
The ECCSA presents its views on the application from ElectraNet SA for a reset of the electricity transmission revenue in South Australia for the new access period AA4 commencing July 2013.

ElectraNet's professed concerns for consumers with the recent massive increase in electricity prices in South Australia (and elsewhere) are not matched by its application. In fact, the recent massive annual increases in electricity prices will receive a significant fillip from the ambit claims contained in the application.

When adjusted for the latest AEMO forecasts of (lower) consumption, ElectraNet's average nominal tariffs will actually rise quite substantially over the AA4 period, and not modestly as suggested by ElectraNet. Unit costs will rise from the current $22/MWh to nearly $30/MWh over the term of AA4. This is shown clearly in the following chart.



Source: ElectraNet application, AEMO ESoO 2012, NEM data

Reflecting a lack of restraint in revenue maximization, ElectraNet is seeking nearly 6% annual real increases in revenue on top of a real step increase of over 4% between the current regulatory period (AA3) and the next (AA4).

When account is taken of a lower WACC sought by ElectraNet (a result of changed financial conditions that prevailed at the time of the reset for AA3) and

the latest AEMO forecasts for South Australia (2012 ESoO) which show a significant decline in consumption and a large forecast step reduction in peak demand, the very substantial increase in revenue sought by ElectraNet is unprecedented.

ElectraNet is seeking for the next regulatory period (AA4):

- $894m in capex, a similar amount allowed for AA3 but against a much reduced forecast of demand growth

- An average annual cost of $85m pa in opex compared to an actual annual average opex of $60m pa in AA3; this is an increase of more than 40% (in real terms) in opex compared to the AA3 costs. To put this in context, the increase in opex to AA3 from AA2 was about 20% and was already considered to be excessive

- An increase in debt risk premium from 342 bp to 398 bp

There are other disconcerting elements in the ElectraNet application, including:

- The claim for the revenue reset to be adjusted for any new “pass through” provisions arising from the current AEMC review of the AER network rule change package

- Costs for land and easements and the depreciation of these values

- An accelerating program of land and easement acquisition

- Changes in service standards and the application of the STPIS.

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 over 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 network to deliver efficiently the electricity so essential to their operations. Many of the members, being regionally based in SA and therefore heavily dependent on local suppliers of hardware and services, also consider that they have an obligation to represent the views of these local suppliers. With this in mind, the members require their views to not only represent the views of large energy users but also those of smaller power using facilities, and even of the residences used by their workforces.

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

1.2 The scope of this review

ECCSA recognizes that this review is being undertaken in a period where there is considerable stress on electricity consumers as the cost of electricity has risen dramatically in recent years. To a significant extent this increase has been a result of changes in the National Electricity Rules in 2007 and 2008 as a result of the AEMC review of the rules pertaining to the transmission sector (chapter 6A).

At the time of these rule changes, ECCSA affiliate, the Major Energy Users (MEU) was particularly critical of the unbalanced approach which provided excessive incentives to network owners. This view has now received considerable support from many independent reviewers who have also expressed concerns about the impact of these incentives. The AER has identified a number of changes to the Rules that it considers will return some balance and ensure a better outcome for consumers but retain sufficient incentive for network owners to continue to ensure their networks provide a reliable service in the long term at a reasonable cost to consumers.

These rule changes will not be introduced until after this review for the ElectraNet revenue reset is complete, but it is still important that the AER recognizes the importance of ensuring the revenue allowed to ElectraNet reflects the new approach to balancing the myriad of competing elements that makes up a revenue reset. Of greatest importance is that the AER takes a holistic approach to the review and its outcomes. In this regard, it is interesting to note that the Expert Panel appointed by SCER to review the limited merits review process (the

LMR Panel) points out that a regulatory review must not only reflect a balance between the needs of the consumer and the provider, but also of the needs of current consumers and future consumers.

Page 37 of the LMR Panel Stage 1 report states:

> "[The National Electricity Objective] cannot reasonably be interpreted as meaning that the interests of consumers today are irrelevant, and that the only thing that matters is the welfare of energy consumers at some distant point in time. It does, however, mean that it is not just the interests of consumers who will vote in the next election that count: there are future generations also to be taken into account."

The clear implication of these observations is that current consumers should not be disadvantaged by the current use of inefficient practices which do not have a negative impact on future users. In terms of this revenue reset review, the AER must have regard for the costs that current consumers will bear when assessing the needs for the future consumers in terms of setting allowances (such as weighted average costs of capital) or investments to provide for future users of the network services.

A further point that has been made by this LMR Expert Panel, is that the AER sets an allowance on an ex ante basis for the use of the service provider. This is merely a "bucket of money" and it does not imply that any specific element used in deriving this monetary allowance necessarily supported any specific element in the build up of the monetary allowance provided. What is important is how this monetary allowance was used and whether it was used efficiently and in the long term interests of consumers. Essentially, an ex ante allowance (say) for capex cannot be approved as being efficient when it can and probably has been used for different purposes. This requires the AER to establish that the monetary allowance was used appropriately.

In addition to ensuring the funds provided were used efficiently, the AER has a responsibility to ensure that the funds are acquired in a way that provides clear signals to consumers to be able to modify their use of the services. This means that the AER must ensure that the pricing structures that are developed as part of the revenue reset review provide appropriate signals to consumers so they are incentivised to take actions so that the network can be operated more efficiently and that the assets have maximum utilization. By this means the costs for both current and future users of the service can reflect value for the money consumers are required to spend on the services.

1.3 A summary view of the ElectraNet application

ElectraNet posits that it has noted the pressures on consumers from the recent massive increases in electricity prices, yet despite this they are still seeking nearly 6% annual real increases in revenue on top of a real step change of over 4% between this regulatory period and the next.

These large increases are comparable to the significant increase at the start of the current period (AA3), followed by 5% real increases each year thereafter. In other words, ElectraNet is seeking even larger revenue increases for this coming period (AA4) as those obtained in the current period; revenues that ElectraNet admits are drivers of the recent "massive increases in electricity prices".

It is important also to note that ElectraNet is seeking larger real increases in its annual revenue despite a much smaller weighted average cost of capital (WACC). The allowed nominal vanilla WACC for period AA3 was 10.65% yet ElectraNet has used a nominal vanilla WACC for AA4 of 7.73% some 300 basis points lower. The implication of this lower WACC is that the costs in other areas have not only increased to offset the lower WACC but have increased more than this so as to deliver an overall real annual increase in revenue.

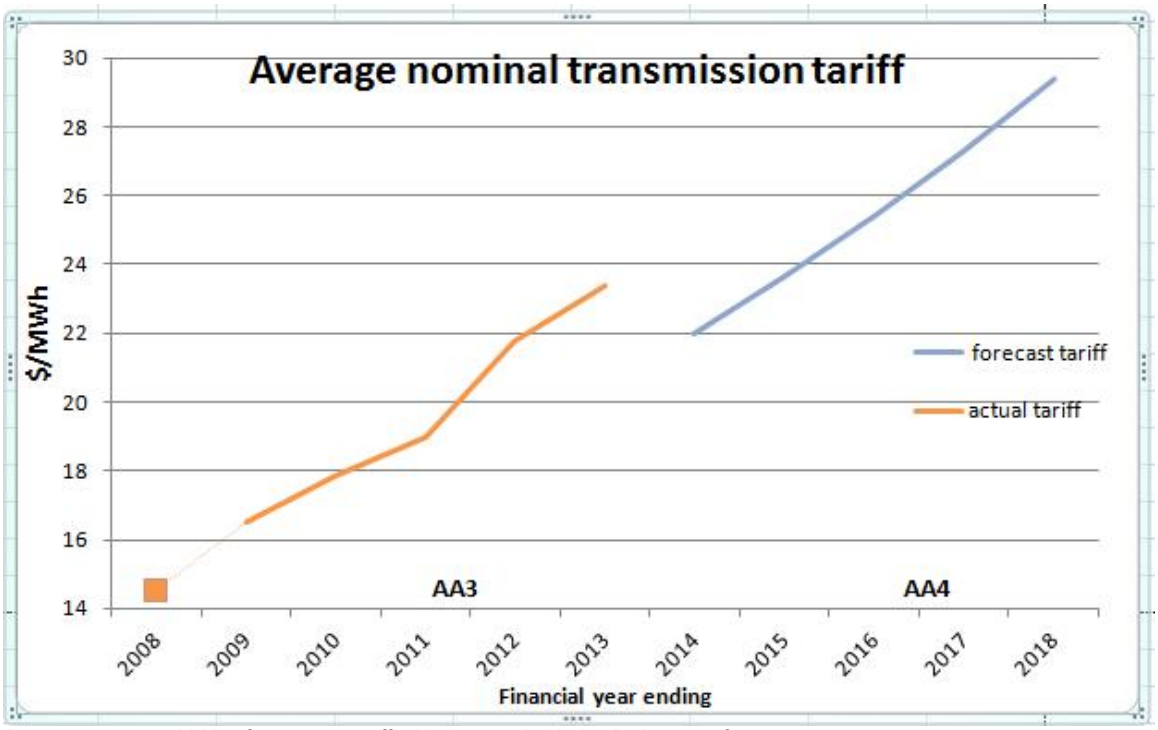
To put this increase into perspective, the forecasts for growth in demand and consumption in early 2008 when the revenue for AA3 was set was considerably higher than the growth forecasts now being seen. In 2007, the expected increase in peak demand was expected to be over 5% annually and an increase in annual capex of 60% was allowed to accommodate this. Implicit in the allowance for capex was an expected peak demand in AA3 of nearly 3600 MW with an expectation in AA4 that peak demand would reach over 4000 MW

The peak demand actually seen in AA3 was 3385 MW (in January 2011) and the AEMO forecast (2012 ESoO) is that this peak demand will not recur until early in AA5. This raises the question as to whether the same level of capex is required for AA4 as was incurred in AA3 when there were expectations for large increases in future demand.

The other key aspect is that revenue continues to rise, yet consumption is falling. It peaked in 2011 and AEMO is not forecasting this level of consumption to be reached again until early in AA5. This means that unit costs for transmission services are going to show a considerable increase because of lower consumption.

The following chart shows the change in average nominal tariff based on allowed (or claimed) nominal revenue related to the actual consumption and the forecast consumption in the AEMO 2012 ESoO. It shows that the ElectraNet costs, rather

than reflecting its stated concern for consumers, are likely to increase more than occurred in AA3 despite a much lower forecast increase in demand. This means that consumers could expect an even larger price shock over the AA4 period if ElectraNet's ambit claims are met.



Source: AER FD 2008, ElectraNet applic 2012, AEMO 2012 ESoO, NEM data

Putting aside for the moment the detail of the elements which comprise the application from ElectraNet, the outcome of the application is that over the 10 year period covering AA3 and AA4, transmission tariffs will rise significantly, from $14/MWh in 2007/08 to 29.4/MWh in 2017/18 in nominal terms[1], a real annual increase of over 5%, after allowing for inflation.

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

The reasons for this increase are stated as being:-

- Increased average capital expenditure of 350% from AA2 to AA3,thereby maintaining AA3 capex rates into AA4 to manage increases in demand
- Increased costs due to the shortage of skilled labour
- Increased costs due to increased material costs

[1] See section 2.1 following

- Increased capital expenditure to replace many aging assets
- Increased maintenance costs due to the age of existing assets
- An average opex increase of 70% from AA2 to AA4
- Increased maintenance costs due to labour costs.

Against these "across the board" cost increases which included a step increase in WACC of 235 bp between AA2 and AA3 which increased revenue, ElectraNet is forecasting a 292 bp fall in WACC from AA3 levels yet the revenue requirement is still increasing despite the WACC reduction. This means that other costs must be much greater than in AA3.

There is almost no suggestion that there is any prospect of any reductions in costs, including efficiency savings or productivity gains Competitive industries which our members belong to, are continually driven to reduce the costs of producing their products, yet regulated businesses seem to depart from the competitive norm by adopting what appears to be an 'historic cost plus increase' culture. In fact, the logic behind the ElectraNet application appears to be one of "trying to get away with as much as is possible".

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

1.4 The helicopter view

The ECCSA is unable to accept that the proposed massive increases in costs can be justified when assessed against a background of falling consumption and the equally massive increases seen in the development of AA3 revenue. Equally, we accept that the applicant has provided arguments in support of each element of their claimed cost increases. In a competitive world, senior management of a business must and do take a view that any claimed increase in cost must be controlled in light of the potential implications for the businesses' competitive position. In the regulated energy sector, however, legislation has provided the AER with the responsibility of providing this discipline, and so it must ensure that the resultant outcomes are in keeping with what can be expected from the discipline of competitive drivers.

At its most fundamental level, a doubling in price over a 10 year period cannot be sustained by any competitive business.

A consistent complaint raised by TNSPs and distribution networks, has been the lack of investment by previous government owners. It is now nearly 15 years since the South Australian government exited ownership of the TNSP and DNSP. Since this time, regulators have already undertaken two reset reviews, and

effectively granted the TNSPs what was requested in terms of capex and opex. The complaint about earlier under investment (if this was the case) is now well and truly passé.

Performance by ElectraNet over the regulated periods since has been acceptable, yet the funds granted at the last review seem now to be insufficient, supposedly warranting a significant increase. ElectraNet has continued to be financially viable, yet more revenue is being sought.

1.5 The materiality of transmission costs

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

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

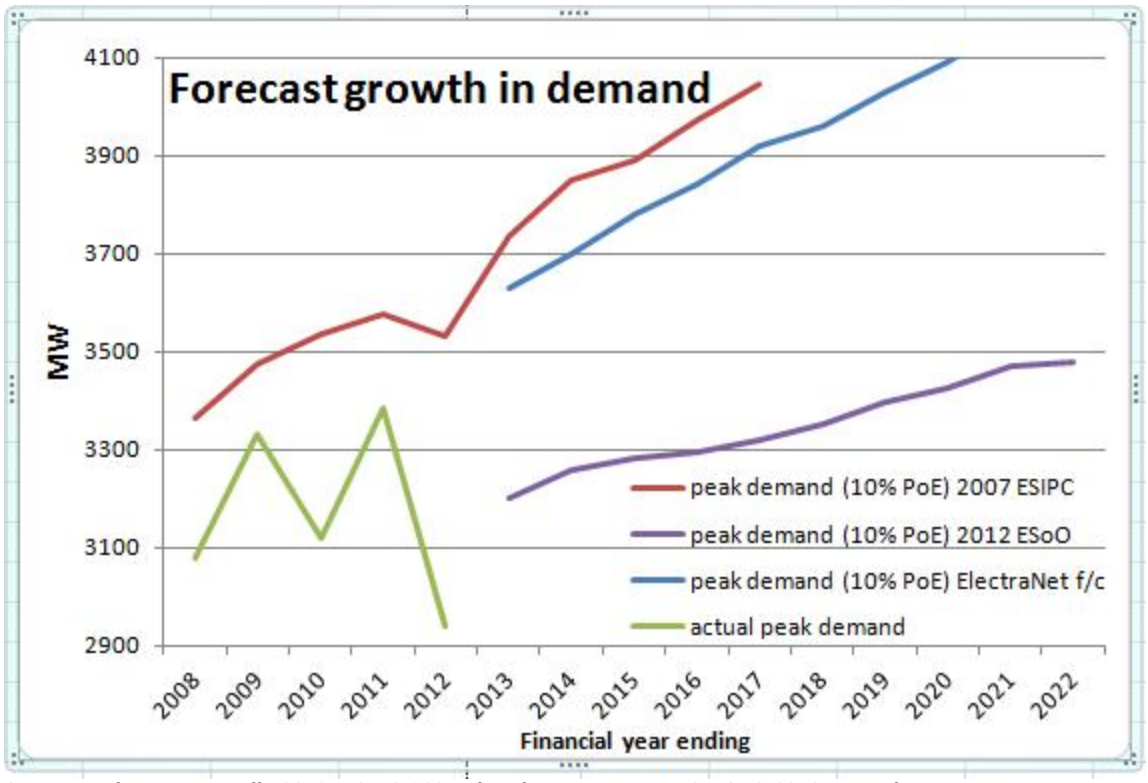
2. Forecasts of demand, consumption and input cost changes

2.1 An overview of demand forecast changes

The Electricity Supply Industry Planning Council (ESIPC) was a government established independent body which assessed the needs of the state with regard to electricity supplies, and in particular the needs for augmentation of the SA transmission network. In 2009, ESIPC was subsumed into the Australian Energy Markets Operator (AEMO). Since then AEMO has prepared forecasts of growth and demand for each region as part of the Electricity Statement of Opportunities

It is noted that the ESIPC and AEMO only addresses the physical needs and not the costs of meeting the needs. Bearing this in mind, despite their forecasts of need, there is an underlying requirement to balance the desires for providing augmentations to the network with the capability of consumers to pay for all of the augmentations ESIPC/AEMO would normally support.

In regard to this, the following graph provides a pictorial view of this very important rider and shows the various forecasts of growth in demand in South Australia with the passing of time.



Sources: ElectraNet applic 2012, ESIPC 2007 Planning Report, AEMO ESoO 2012, NEM data

The chart highlights some very important insights.

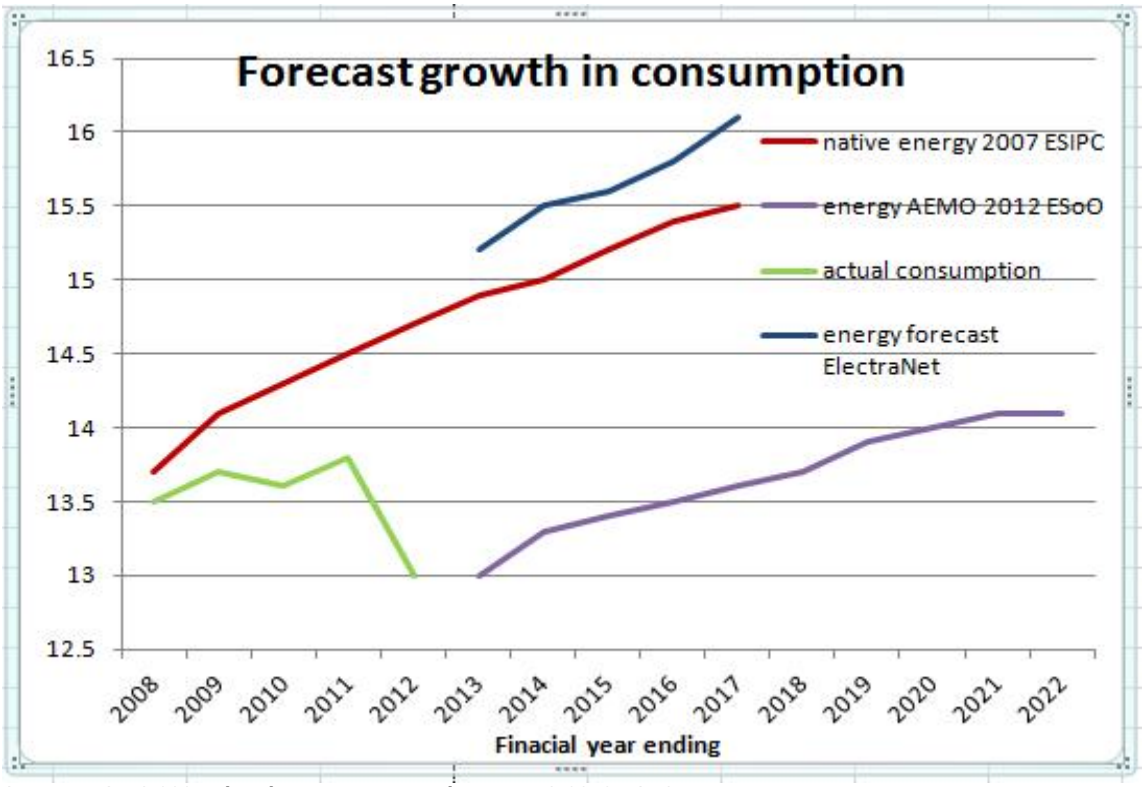
1. The forecast for capex in AA3 was based on the ESIPC 2007 planning report. It showed that there was a significant growth expectation in the SA region and this provided the basis for the ElectraNet augmentation capex
2. The actual demand in the region for AA3 was significantly less than the ESIPC forecast and implies that the amount of capex was overstated as the actual peak demand was well below the forecasts. The implication of this is that ElectraNet likely installed capacity in the network that is underutilized
3. ElectraNet advises it used the AEMO 2011 forecasts for expected growth in demand for AA4 and while the expected demand for AA4 is less than that forecast by ESIPC in 2007, ElectraNet would have used this new forecast as the basis for its capex program.
4. AEMO has significantly revised downward the forecasts of peak demand in its 2012 ESoO. The AER should require ElectraNet to revise its capex to reflect the new forecast of future demand as this shows that the expected peak demand will not exceed the actual peak demand already seen in 2011 before the start of regulatory period AA5. This implies that the current ElectraNet network should not require any augmentation until AA5 at the earliest.
5. It should be noted that some of the capex in AA3 would have been dedicated to the growth in demand that is to occur in period AA4 as augmentations are “lumpy” and commonly new assets are sized to accommodate future growth. This means that significant amounts of capex in AA3 will reflect needs that are unlikely to occur until AA5.

2.2 An overview of consumption forecast changes

The ECCSA accepts that as ElectraNet operates on a revenue cap regulatory approach the issue of identifying accurate forecast of expected consumption of electricity is very much lower in order of importance.

That said, the aspect of expected consumption is very important to consumers because the less the consumption the greater the costs per unit of energy consumers are required to pay. The amount of consumption must therefore impact on the AER assessment of expected opex and capex because, if the AER allows large increases in these two elements of the building block and the costs are recovered over a declining consumption base, the outturn costs per unit will severely impact on consumers’ ability to pay.

The following chart shows the changes in the forecasts for consumption over time.

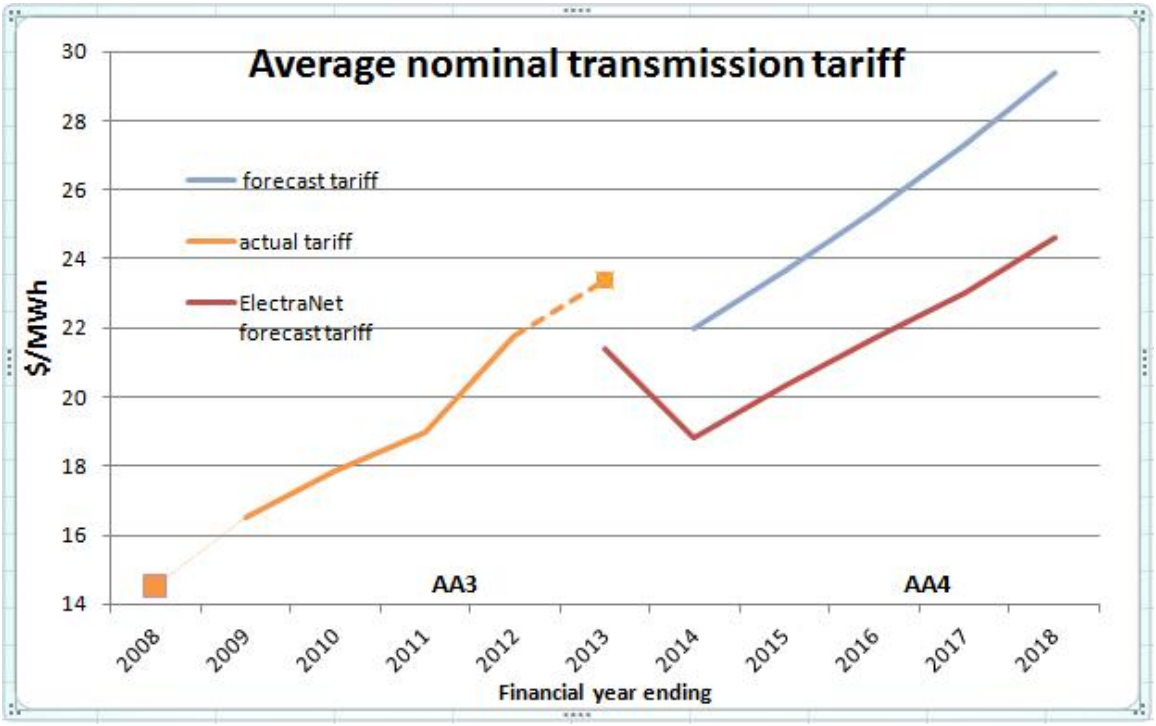


Source: ESIPC 2007 Planning Report, NEM data, AEMO 2012 ESoO

The chart highlights some important aspects:

1. When the 2008 Final Decision was made by AER there was a strong expectation that consumption would increase significantly, thereby keeping unit costs relatively low
2. In fact, consumption remained relatively flat in the early part of AA3 and declined significantly at the end of the period, with the result that unit costs were significantly higher than was expected
3. Despite the actual consumption data showing a declining pattern, the ElectraNet forecast (on which it based its forecast average tariffs) is even higher than the ESIPC forecast made in 2007
4. The AEMO 2012 ESoO is expecting that over AA4, consumption will remain lower than that experienced in 2011/12 and will not exceed the level of consumption experienced in 2010/11 until period AA5.

In its proposal ElectraNet provided a forecast of the average tariff for AA4 (figure 12.2) based on the higher consumption figures and as a result provides a misleading view of what average nominal tariffs are likely to be. This is clearly shown in the following chart which shows the forecast tariffs calculated by ECCSA (see section 1.3) with the tariffs forecast by ElectraNet (table 12.9).



Source: ElectraNet application, AEMO ESoO 2012, NEM data

AS the chart shows, average nominal tariffs are likely to be much higher than ElectraNet contends. Based on the claimed revenue and the AEMO forecast of the expected consumption, tariffs are likely to reach nearly $30/MWh by the end of AA4, some 20% higher than ElectraNet implies.

2.3 Escalation forecasts for labour and materials

2.3.1 Wages cost growth

ElectraNet has expressed a preference for using AWOTE as the basis for general movements in labour and for its enterprise agreement to be the basis of its labour cost movement for directly employed labour. ElectraNet argues that these forecasts should not be adjusted for productivity as productivity improvements are included in the scale factors used to adjust opex costs.

The reason that regulated firms seek to use AWOTE is that this appears to give a higher cost forecast than LPI and would therefore provide the regulated firm with a larger profit.

The AER and regulated network providers have had a long running debate as to whether AWOTE or LPI provides a better forecast of future labour

costs, and this issue has been raised at nearly every regulatory reset. The AER has consistently provided a strong case as to why the LPI adjustment is a better indicator for future labour cost movements and the ECCSA cannot add to these. Another MEU affiliate, the EUCV, also supported the AER at the last Victorian pricing review in its continued use of productivity adjusted LPI.

What the regulated firms have all failed to recognize is that the outcome of using LPI has not disadvantaged the regulated firm because consistently, actual opex costs have, over time, been generally less than the regulated allowance. On this basis alone, there is no sound reason for the AER to vary from its present practice of using productivity adjusted LPI to forecast future labour cost changes.

Despite its preference for using AWOTE, ElectraNet accepts that a labour price index (LPI) will be used for adjusting forecast labour, providing it is not adjusted to productivity movements. The ECCSA agrees that the LPI should be used but that it must reflect productivity adjustments consistent with previous AER decisions. The ECCSA considers that productivity improvements are not implicit in the scale factors that ElectraNet uses to adjust its base opex allowance and would not be included in the adjustments made for the labour proportion in capex amounts.

ElectraNet also seeks for its enterprise agreement to be used as the basis of its movement in the costs of its directly employed labour. The ECCSA does not consider that a regulator should adjust costs to reflect future cost changes that have been negotiated by a single firm. This does not necessary reflect an efficient outcome and provides a bias towards higher labour costs than might occur under a more independent approach.

For example, if the AER allows the enterprise agreement to be used to set the future costs, this provides the Union with a clear signal that whatever labour cost movements are agreed will be rolled into the next regulatory decision. If this occurs, the firm has no strong driver to negotiate the lowest possible price for labour or even to seek productivity offsets. If the AER uses an independent assessment of expected labour price movements, then the firm has a driver to negotiate a lower price for labour as this would provide a benefit to the firm. It does not lead to an efficient outcome where both parties to a negotiation are aware that whatever is agreed the cost will be borne by a third party. This is not reflective of incentive regulation, but really of cost plus regulation. It is not even consistent with the National Electricity Objective (…in the long term interests of consumers").

The ECCSA considers that the future movements of directly employed labour should be adjusted using an independent index (the productivity adjusted LPI) rather than using a specifically negotiated agreement between ElectraNet and its employees. This approach reflects the basis of regulation which sets allowances based on the notional efficient provider. To allow the use of a specific enterprise agreement would be akin to the regulator recognizing that the actual gearing of ElectraNet was nearly 90% and using this in the development of the WACC.

As the AER has consistently attempted to assess the allowed revenue to include costs which the notional efficient service provider would incur, to use a specific enterprise agreement between ElectraNet and its workforce would be inconsistent with the basis of the regulatory approach.

The ECCSA considers that:

- Capex labour costs should be adjusted for forecast movements in the productivity adjusted construction LPI
- Direct labour costs should be adjusted for forecast movements in the productivity adjusted EGW labour LPI

This approach maintains consistency with previous AER decisions and provides regulatory certainty of approach.

2.3.2 Land cost growth

The ECCSA is not sure what ElectraNet is seeking by having a land cost growth adjustment. The ECCSA has concerns on five aspects.

1. If ElectraNet is proposing to increase the value of land acquisition for its entire land easements, then this should not be allowed. ElectraNet was granted an increase in its RAB to allow for the costs incurred in acquiring easements that had been transferred to it at the time of the acquisition by ElectraNet of the government owned transmission assets. This cost of acquisition does not change with changing land values and is a fixed element within the RAB. To escalate this cost in terms of land value is simply not appropriate. This aspect needs to be clarified by the AER.
2. The acquisition of easements is not related to the value of the land as the land never changes ownership – it remains with the owner of the land over which the easement is permitted. The costs for acquiring the easement (survey costs and recompense to land owners are recovered as an element of opex. These costs do not

relate to the cost of land. Therefore the changes in the cost of land do not impact the costs incurred in the acquisition of easements

3. Land already owned by ElectraNet has been paid for and, although the value of the land should it be sold might reflect a higher price if sold than was paid for the land, the value of the land acquired should be fixed at what was paid. This amount is usually not depreciated but if included in the RAB would be increased by the CPI adjustment used in developing the regulatory adjustment for the RAB in the roll forward approach used to calculate the RAB for the next regulatory period. This issue is discussed further in section 3 below.
4. If the land cost growth adjustment is to make adjustments in the forecast capex to reflect the cost of acquiring land in the future, then the ECCSA sees that this could be acceptable in principle. The ECCSA has a concern that the approach used by ElectraNet to calculate the land cost escalation factor is biased towards residential land whereas land that it is likely to acquire will likely be rural, commercial or industrial land which is where the land it requires will be sourced. The AER should ensure that the adjustment factor it allows to be used reflects the land type that ElectraNet is likely to acquire rather than one which is the weighted average of all land.
5. The application averages land growth cost over 15 years, yet the growth in the value of land has been negative in recent years. Forecasts are meant to be forward looking and not rely on past indexes. In this regard, the growth in land values needs to be forward looking and not rely on historical data. Therefore the AER should be looking at the expectation of the future land growth costs over the next five years. Based on the generally publicly available data on land prices, there is expected to be, at best, quite modest land price growth in AA4, and this should be the basis for any adjustment in land price growth.

2.3.3 Materials cost growth

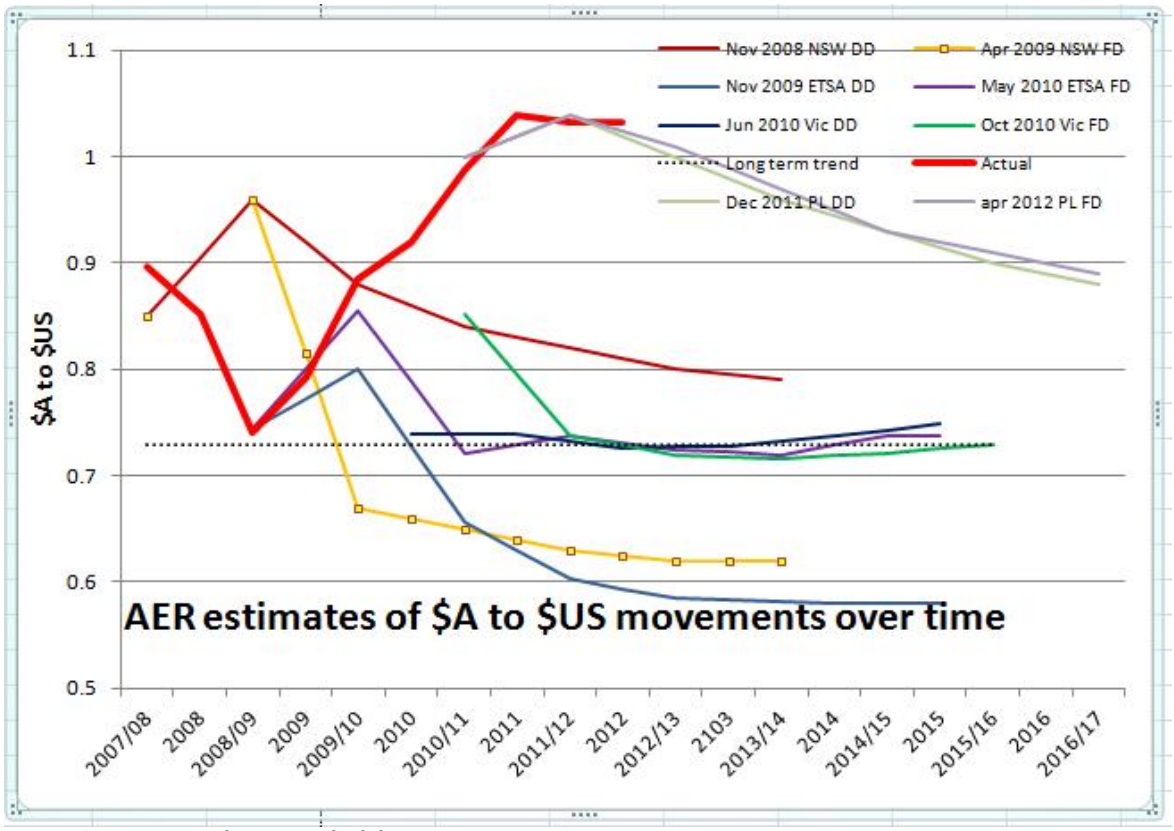
ElectraNet provides its view of the movement in material and the movement in the $A-$US which adjusts these to reflect local costs. It then provides a view of the likely changes in materials costs over time based on research by CEG.

What ElectraNet does not do is provide the weighting of each material element to its mix of materials and demonstrate that the weighting is reflective of its actual mix.

The ECCSA is concerned that forecasts of materials cost movements are based on assumptions that are inappropriate for the use to which they are put. For example,

- If the forecasts are to be used for budgeting purposes then they will include a degree of conservatism. There is no indication as to the degree of conservatism that has been used in their development
- How accurate have these forecasts been in the past? Has there been any assessment as to compare the forecasts with actual costs to identify the degree of accuracy implicit in the forecast?

To assess the accuracy of forecasting of future costs, the ECCSA has been plotting forecasts made by the AER in terms of $A-$US over a number of years in AER regulatory pricing decisions. This shows that the forecasting accuracy has been extremely poor, and the inaccuracy has provided regulated firms with a considerable benefit at the expense of consumers.



Source: RBA data, AER decisions

What this shows is that the forecasting accuracy of the AER (and its advisers) has been quite poor. When the obvious inaccuracies in assessing the $A is added to inaccuracies in forecasting the change in cost of specific

materials and then adjusted to "real" values by estimating the value of the general market inflation (CPI) the inaccuracies become cumulative.

The ECCSA considers that the AER needs to find another approach to making adjustments to capex and opex allowances to reflect expected movements in input costs. The current approach has caused considerable harm to consumers (as can be seen from the inaccuracies in the forecasts of the $A) and could, in the future, cause harm to regulated firms.

In previous submissions, affiliates of the Major Energy Users- MEU – (of which ECCSA is one) have suggested that this inaccuracy could be overcome by the use of an escalation factor unique to the energy market which the AER would generate annually for adjustments to allowed revenues.

The decision of the AER to not use such an approach is strange. The argument put by the AER was that allowing for annual adjustments to allowed revenues by using the CPI provided some certainty for consumers and regulated firms. However, especially for revenue cap decisions, there are frequently massive adjustments in tariffs because of large movements in other input costs. There are large swings in current year revenues caused by under or over recovery of the allowed revenue in the previous year coupled with large swings in returning to consumers the benefit of the inter-regional settlement residues. MEU members report seeing transmission tariffs vary year on year by as much as 20%.

If swings of this magnitude can occur without using an input cost adjustment index, then the AER argument fails to be legitimate. Even the AER preference for allowing adjustments of CPI results in considerable variation as allowances for inflation made in revenue reset decisions have been in error by more than 100%.

Many industries use cost input adjustment indices that are not the CPI to reflect the industries special needs, so a decision to use a more accurate approach for allowing for variation in input costs would not be ground breaking in the least.

3. ElectraNet regulated asset base

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

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

Each element is discussed below.

3.1 Starting RAB

The starting RAB for AA4 will be the starting RAB for AA3 adjusted for capex, depreciation and inflation. The starting RAB for AA3 should be the assessed closing RAB from AA2 with adjustments to reflect the difference between the assumed and actual capex and inflation that was incurred in the last year of AA2.

3.2 Capex included in AA3 RAB

The Chapter 6A rules state that the RAB will be adjusted for actual capex incurred over the current period. It is assumed that the actual capex is efficient and there is to be no ex post assessment to ensure that the capex incurred really was efficient.

The AER should carry out a review of the actual capex incurred to ensure that it was prudently incurred. Although the AER does not have the power to optimize capex (ie must roll forward the actual capex regardless) the AER must ensure that the controls imposed on ensuring capex was efficient and are effective. This is an essential step to ensure that the claimed capex for AA4 is demonstrably prudent and is likely to be used in accordance with the arguments used to underpin the forecast capex.

3.3 Depreciation and inflation

The ECCSA notes that ElectraNet has provided a depreciation schedule for its various assets. What is not included in the depreciation schedule is the depreciation of actual land holdings and the depreciation of the amount in the asset base that ElectraNet was granted by the AER and the ACT for the costs incurred for easements. In each of these cases ElectraNet has noted that these items are defined as “not applicable”. We are very curious with this claim.

Depreciation is a return of capital to the provider over time and, in theory, the capital for an asset should have been returned to the provider concurrent with the asset requiring replacement.

There are some assets included in the RAB that do not have a fixed asset life and therefore the return on the asset is paid forever. This aspect needs to be addressed, especially as all assets are inflated in value by CPI each year in accordance with the regulatory model.

3.3.1 Land values. ElectraNet does own some land which is held by right of conventional purchase since it was first regulated as well as land that was acquired from the SA government when ElectraNet acquired the assets and right to operate the SA electricity transmission system. As the RAB is automatically escalated each year by CPI, this means that the values of the land held by ElectraNet are likewise escalated at CPI.

ElectraNet recovers the regulated WACC each year on these escalated land values. Taken to its logical conclusion, over time these land values will become increasingly larger proportions of the RAB as they are not depreciated in the way assets that age do. At 2.5% inflation, this means that the land assets ElectraNet purchased from the government will, after the 200 year period for the licence, for every $1m in land asset value at current inflation of 2.5% annual inflation to be worth $139m with ElectraNet gaining a regulated return on this value. In a competitive environment, land values do not receive a regulated return on the asset value, but tend to provide their main value when sold and after development. The value of the land at the time of the sale also includes a cost to remediate the land.

ElectraNet is not developing the land it has acquired for conventional yields but to use it to assist in providing the regulated service. Under this arrangement the land that ElectraNet owns would not achieve yields that reflect traditional development potential and possibly might earn negative yields because the land is used for purposes which tend to devalue property values nearby.

The AER needs to develop a methodology which recognises that land acquired by electricity transmission firms is not continually increasing in value and acquires a high regulated return. The ECCSA considers that, just as competitive firms do, land held by ElectraNet should not be automatically inflated without attracting depreciation. More so, the land value used in the RAB should be depreciated to allow for the cost of remediation to return the land to the state it was in at the time of acquisition.

3.3.2 Easements. In the AER final decision for ElectraNet in 2008 it allowed easement compensation costs of $29m into the RAB and in the appeal to the ACT by ElectraNet, the ACT allowed the inclusion of $53m of easement transaction costs into the RAB. This was against the backdrop where the ACCC had allowed some $3m into the RAB for easements in its 2003 decision on ElectraNet's revenue reset.

As occurs with land values, these additions to the RAB are not depreciated and are automatically inflated by the CPI each year. This means that the amounts for acquiring easements included in the RAB will continue to grow. There is also the potential that ElectraNet might seek to inflate the values for easements using the growth in land values.

The ECCSA is concerned that inflating the values of easements over time will result in ElectraNet gaining unearned returns on these inflated values. This is not efficient. It is accepted that ElectraNet has been assumed to have incurred these costs in the acquisition of the easements, but these costs do not automatically increase over time, nor should they attract the full return on investment that other assets gain.

Easements are an entitlement granted by government to Electranet to use someone else's land for the purposes of allowing the transmission of electricity. They do not grant ownership of the land and therefore should not be increased in value at the rate that land might appreciate. Easements do not require replacement like other assets do as they age – they are granted in perpetuity. Easements can be relinquished and ElectraNet is not entitled to any benefit if they are relinquished. Therefore, easements must be treated differently to all other assets in the RAB.

Over the 200 year licence that ElectraNet has, the value of easement acquisition of $82m will generate a nominal return to ElectraNet of $8m pa based on the nominal vanilla WACC granted in the AER 2008 final decision. This means that consumers will have repaid ElectraNet the value of the easements every 10.5 years and over the 200 years of the ElectraNet licence consumers will pay ElectraNet some $1.6 Bn.

This is untenable and imposes costs on the future consumers that bear little resemblance to the costs that Electranet incurs. Easement costs are really an operating expense and should be treated as such, and these costs should not have been capitalized.

The AER must implement a methodology that provides a reasonable return to ElectraNet for the costs that have been incurred in the past to

acquire these easements but they should not provide an open ended cash flow forever.

3.3.3 Refurbished powerlines

ElectraNet has introduced a new category in its depreciation schedule of overhead refitted powerlines. The asset life of these is noted as 15 years. The ECCSA accepts that a refitted powerline should have an extended life and therefore supports the inclusion of the category. The ECCSA considers that a refitted powerline might well have a longer life than the noted 15 years and suggests that the AER should seek an independent view as to whether this period is reasonable.

However, the issue does raise a concern that the ECCSA has – the replacement of used and useful assets which are fully depreciated and with assets that are replaced before they are fully depreciated.

The assumption about the powerline refit is that that the powerline assets are fully depreciated before the refit is conducted. The refit should maintain the powerline in a fully operational state for the period assessed as the depreciation period of 15 years.

The ECCSA considers that the approach does reflect good practice providing that the retained but fully depreciated assets are not revalued into the new depreciation class and that only the cost of the new assets are depreciated. Put another way, the ECCSA considers that only the new capex used to extend the powerline life is subject to the new depreciation rate and that the old retained assets remain classified as fully depreciated but still used and useful assets. This is very important.

4. ElectraNet WACC

4.1 About the weighted average cost of capital (WACC)

In the recent reviews of network resets, there has been advice from the applicants that there is a need to set the WACC parameters to values that provide an increase in the WACC or a reduction of the amount of tax that is subject to imputation. Considerable effort by applicants has been devoted to "drilling down" into available data to "prove" that changes are required to provide a WACC that reflects "reality". What no one, including the AER, has done is to assess whether the outcome of the various levels of WACC calculated are efficient and reflect an outcome that provides an efficient WACC – one that provides an adequate return to the network provider but neither over provides nor under provides when compared to what occurs in the competitive market.

This view is supported by the Chair of the AEMC, Mr John Pierce, who is reported as stating[2]:

> "You've got to have the right rate of return. The first question is, what's the minimum rate of return necessary to attract funding so people will invest in the sector. Secondly, we want people to operate efficiently so what we need is an efficient benchmark rate of return… we want them to try and beat it so the shareholders get the benefit of it, so that next time around it can be shared with customers.
>
> ''But if they don't … then you also want the shareholders to suffer … if I'm inefficient, I want the shareholders to carry that risk, not customers."

Some of the claims made by applicants have ultimately been referred to the Australian Competition Tribunal (ACT) for a ruling. In the case of imputation the ACT has determined the proportion of dividend subject to imputation. The ACT has also been heavily involved in the way the AER has to use scarce publicly available data on the values of Australian corporate bonds in order to manipulate minimal data into a form which might be used to infer a debt risk premium for the benchmark BBB+ rated entity.

The applications from various network owners tend to accept parameters that are on the "high side" and sought to increase those considered by them to be on the "low side". For example, some have sought an increase in the market

[2] "High power rates: it's a poles and wires story", SMH *June 12, 2012*

risk premium to a high of 844 bp and expended considerable effort, argument and appeals to get debt risk premiums well in excess of 400 bp.

It is obvious that the recent low yields for 10 year CGS has raised concerns with all network owners as they provide considerable evidence that a long term 10 year CGS has a much higher value (by some 250-300 bp) than the current levels experienced. As a result some network owners have argued that either the long term average 10 year CGS should be used as the basis for the CAPM calculation, or that higher levels of market risk premium should be used to accommodate what they consider to be a disparity in the calculations for the equity and debt components of the WACC that arises from a low risk free rate.

What concerns consumers is that all such approaches are "all one way" as when the approach used by the AER has resulted in levels of debt risk premiums well in excess of actual costs, the regulated businesses have not sought lower levels – in fact they have actively sought, through the ACT, for even higher levels to be used. After enjoying the benefits of a financial market that has resulted in higher levels of WACC than was incurred, it is therefore somewhat perverse to seek a significant change in the approach to setting the WACC parameters because the outcome of the previous approach is not as attractive.

In its responses to the WA Economic Regulatory Authority (ERA) in response to its Draft Decision on Western Power, the WA Department of Finance made the following observations[3]:

> "The Authority's attention is also drawn to the risk of using a 20 day average to calculate the risk free rate given the significant degree of uncertainty and volatility in international financial markets at present.
>
> Given the turmoil in the financial markets emanating from Europe at the moment and the cascading effect that has on international financial markets, it would seem risky to base a five year WACC determination on a 20 day average in this environment.
>
> The Authority is therefore requested to consider this matter further in its deliberations and determine what would be a more appropriate averaging period that ensures Western Power is not 'locked in' to an artificially low return

[3] Page 2 Dept of Finance submission to ERA dated 29 May 2012 available at http://www.erawa.com.au/3/1181/48/_western_powers_proposed_revised_access_arrangemen.pm??utm_source=ERAwebsite&utm_medium=HTML&utm_content=TextLink&utm_campaign=MostViewed

> on its assets for the entire five year regulatory period, as a result of this current market volatility."

However, this view to change the approach used for over 15 years to setting regulated WACCs is then undone when the WA Department of Finance then seeks for the ERA

> "…to consider the importance of regulatory certainty and how it impacts Western Power and indirectly, its end consumers."

Regulatory certainty is at the very basis of the AER Statement of Regulatory Intent (SORI). To vary from the longer term practices introduces uncertainty, so the AER has to be cognizant of the risks inherent in changing regulatory practices because the wider financial environment has changed. The AER maintained its flawed practices for setting the debt risk premium (which benefited the regulated firms) despite clear evidence that the financial environment had changed. The AER decision to continue the use of the flawed process (coupled with successful appeals from regulated firms) delivered considerable harm to consumers and increased profits to the regulated firms.

In its recent draft decision on Western Power the ERA decided to use the 5 year CGS rate, an MRP related to the 5 year CGS of 600 bp, an equity beta of 0.65, a credit rating of A-, a shorter borrowing term than 10 years to reflect actuality of the debt portfolios seen in the market[4] and less reliance on the Bloomberg data. This change has been precipitated by a recognition of allowed WACCs being seen to be considerably higher than the actual costs of capital incurred by the low risk network monopolies.

The ERA revised approach has tended to reset the calculated WACC to a level which more reflects what actually is occurring in the wider market. Whilst the ERA decision is, at the time of preparing this submission, still at draft stage, the arguments included in it are very detailed and provide totally different conclusions to those that ElectraNet and its consultants provide.

The ECCSA makes the above general comments because there is considerable debate as to whether the current approaches used to assess what represents a reasonable weighted average cost of capital. In particular, it should be noted that recently ElectraNet sought to get changes to the Rules to receive a better outcome for itself.

[4] This approach has the added benefit of increasing the population of corporate bonds to provide greater reflection of the actual costs.

4.2 The WACC for ElectraNet

Chapter 6A of the national Electricity Rules is quite prescriptive in what the WACC parameters are to be and how they are calculated. Specifically, Chapter 6A requires there to be a review by the AER of the WACC parameters every 5 five years (the "WACC review") and that the outcomes of that review must be applied to all decisions on electricity transmission networks until the next review. As the next review does not take place until late in 2013 for a decision in 2014, the parameters determined at the 2009 review still apply.

At the 2009 WACC review, the AER determined that:

- The risk free rate is to be the 10 year CGS averaged over a short period before the final determination is made
- The market risk premium (MRP) is 650 bp
- The corporate tax rate is 30%
- Gearing is 60% debt and 40% equity
- Equity beta is 0.8
- The value of imputation credits is 0.65
- The debt risk premium is to be calculated from the 10 year Australian BBB+ rated corporate bond rate

ElectraNet has applied these parameters in its current application. This is despite ElectraNet already gaining a benefit from a number of aspects that actually reduce its actual cost of capital. For example:

- ElectraNet operates at a much higher gearing than 60% (at nearly 90%) yet retains a BBB+ credit rating
- Observed equity betas are closer to 0.65 than to 0.80
- The AER has in recent decisions reduced the MRP to 600 bp

Under the Chapter 6A Rules, the WACC parameters are set at the WACC review. Therefore there is no need to address any of the parameters other than the debt risk premium (DRP) for which there is considerable debate and little useful direction in the Rules.

4.3 Debt risk premium

The main area of contention remaining is the approach to developing the debt risk premium (DRP). The AER has been attempting over the past 5-6 years to develop an approach to the development of the DRP from scarce market data that delivers outcomes that are significantly higher than the actual costs of debt incurred by networks.

There is no doubt that regulatory decisions made since the onset of the GFC in 2007 have provided a DRP at a level greatly in excess of the actual cost of debt acquired by regulated firms. Government owned networks have been granted allowances for the cost of debt at 200-300 bp above the cost they actually incurred, and privately owned firms have been granted debt costs some 100-200 bp above their actual costs.

Implicit in the Electricity Rules is that the rate of return is to be efficient and to reflect best practice. There can be no doubt that recent regulatory decisions by the AER have not provided efficient levels for the cost of debt. The AER itself has noted that the cost of debt actually incurred by energy networks have been significantly below the benchmark allowances used and as a result the AER has attempted to introduce new data into the approach they have conventionally used. Appeals to the ACT have resulted in these attempts being found to be inconsistent and the ACT has even suggested that the basic approach used by the AER for assessing the debt risk premium might be flawed.

Despite the fact that the outcomes of their approach deliver patently incorrect and excessively high DRP values, the AER has continued to use a methodology which requires interpolation and extrapolation of a non-transparent data set which itself is based on a very few data inputs. Such an approach cannot be demonstrated to produce an efficient outcome.

However, the Rules do permit the AER to use other approaches to developing a debt risk premium. The ECCSA considers that the AER has a responsibility to consumers not to continue the use of a flawed process that delivers a DRP well above the efficient level.

The ECCSA has reviewed the annual reports of the four privately owned electricity and gas network firms operating in Victoria and listed on the stock exchange[5]. The outcome of this review is tabulated below[6] providing the actual DRPs (compared to the 10 year CGS) for the parents of these electricity and gas transport businesses.

[5] As most of the electricity transmission and distribution businesses are government owned, they borrow from state treasuries which have even lower lending costs. State treasuries have AAA credit ratings and lend at a small premium to their associated networks

[6] Whilst it is recognized that each of the separate networks are part of a larger group, the information does not differentiate the different types of infrastructure (eg DUET has a much wider asset type base than the others) and APA Group has mainly gas assets, many of these are unregulated. With this in mind, a regulated energy network monopoly would be expected to have a lower risk profile than other assets in the parent businesses and therefore the debt risk premium for the regulated entities will be lower

Actual DRP (bp)	Credit rating[7]	Debt/ assets	2008	2009	2010	2011	Av'ge
AER allowed (elec trans)	BBB+	60%	211	211	211	211	211
AER allowed (elec dist, SPA)	BBB+	60%				405	
AER allowed (elec dist DUET)	BBB+	60%				374	
ESCV allowed (elec dist)	BBB+	60%	130	130	130		130
ACCC allowed (gas trans)	BBB+	60%	299	299	299	299	299
ESCV allowed	BBB+	60%	215	215	215	215	215
SP Ausnet (elec trans and dist, gas dist)	A-	66%	-50	80	60	50	35
APA (Gas trans)	BBB	69%	100	310	240	300	235
DUET (Multinet and United gas dist)	BBB-	80%	80	160	190	200	160
Envestra (gas dist)	BBB-	81%	150	330	220	290	250
Arithmetic average for energy firms	BBB	74%	70	220	180	210	170

This ECCSA analysis provides some interesting observations:

- The allowance provided by the AER considerably exceeds the actual premium incurred by each firm and that provided by the ESCV exceeded the average cost incurred by the gas distribution businesses but was marginally lower than that allowed for the DUET electricity distribution[8] business.
- That the credit ratings of all the businesses reflect higher gearings for the businesses but that the credit rating of BBB+ is more reflective of a higher gearing than 60% debt/assets
- The calculated DRP varies year on year but that the main cause of this is not so much a variation in the cost of the debt but more that the movement of the DRP reflects the year on year movement of the risk free rate
- None of the actual debt risk premiums reached the level of 398 bp claimed by ElectraNet in its application
- Efficiently acquired debt is well below the benchmark sought by ElectraNet and well below the benchmark DRP allowed in recent revenue rests

[7] Sourced from ERA draft decision on Western Power Table 71, page 174
[8] Despite the DRP allowance being lower for the electricity distribution business, United Energy still exceeded its allowed revenue and expected profit

An efficient debt risk premium does not provide an outcome which is demonstrably higher than the costs actually incurred by a "going concern". The Chapter 6A Rules require the DRP to be calculated from 10 year Australian corporate bonds. However, the process for developing this outcome from the very small number of bonds appropriate bonds requires interpolation (to get to BBB+ credit rating) and extrapolation to get to 10 year bond rates

There is no doubt that the approach used by the AER to establish a debt risk premium is flawed and delivers a DRP well in excess of the actual costs incurred by an efficient service provider. Similarly the approach developed by PwC and used by ElectraNet in its application reflects similar flaws. Regardless of which approach is used (AER and PwC) there is no doubt that network owners have consistently been able to acquire debt at a cost well below the allowances provided by the AER and other regulators. This shows that there are more efficient methods of debt acquisition than the approach used by the AER.

The Electricity Law and the Electricity Rules are specific that the costs allowed a service provider are to be efficient and not less than needed to provide the service. To award a debt risk premium that is demonstrably not efficient and significantly exceeds the actual costs is not in accordance with the Law or Rules and the AER must deny the approach proposed by ElectraNet and implement an approach that delivers an efficient outcome.

The ECCSA considers that the market evidence indicates that the debt risk premium should be no more than 170 bp above the 10 year CGS or 195 bp above the 5 year CGS. This value of DRP compares favorably with the value of 203 bp (vs the 5 year CGS) calculated in the ERA draft decision for Western Power.

The regulatory approach used in Australia is based on incentives, so that the providers will actively seek to make its operations more efficient and for these savings to be passed onto consumers in the long term. This means that the first assessment of the regulator is to identify how the regulated firm has improved its efficiency and for these efficiencies to be built into the future allowances. The second stage of ensuring efficient outcomes, is for the performance of the regulated firm to be benchmarked against "best practice" seen in the provision of the services.

This means that the AER is required not just to use approaches that it has used in the past, but to actively recognize what is "efficient" and "best

practice" so that the long term interests of consumers are integrated into each regulatory decision.

4.4 Pass through events

The use of "pass throughs" is a mechanism for the regulated entity to reduce its risk by passing these onto consumers. Regulators have been inclined to accept this approach as they (rightly) fear that an allowance in the costs to accommodate this risk might be too high. However, there is a need to ensure that this transfer of risk is minimized and that the equity beta adjusted to reflect the reduced risk.

In the current Rules there are defined elements where the "pass through" of actual costs is permitted. However, ElectraNet is seeking to have its revenue reset adjusted by any new "pass through" provisions that might eventuate from network rule changes currently under review by the AEMC.

The ECCSA does not consider that this is appropriate. The AER final decision (subject to the outcomes of appeals to the ACT) should be final and no further allowances should be permitted resulting from future rule changes. To allow any regulated service provider to be able to change its revenue allowance because of future rule changes reduces the impact of regulatory certainty that provides benefits for both the regulated entity and consumers. This proposed and unique approach is quite unprecedented in incentive regulation and brings new meaning to ambit claims.

The ECCSA considers that allowing "pass throughs" for future changes will provide a benefit for the regulated firms because regulated firms will only trigger "pass throughs" which provide them with a benefit

5. ElectraNet Opex

On page 84 of its proposal, ElectraNet provides a statement of the drivers of its opex program in support of its increased opex costs. These are:-

> "The key cost drivers contributing to the level of forecast operating expenditure are:
>
> - a growing asset base to meet increased customer demand requires higher levels of operating expenditure (net of scale efficiencies);
> - continued implementation of a best practice asset management framework to encompass all network assets and manage the increased level of network risk revealed through improved asset condition information;
> - the drive to improve asset utilisation, maximise network performance and capability in order to defer the need for capital investment and deliver lowest long-run cost solutions;
> - real wages growth and related cost pressures caused by a projected strengthening in employment demand in the mining and construction sectors in South Australia; and
> - a number of scope changes and new regulatory obligations imposing additional costs on the business."

Each of these points is addressed in turn by ECCSA in succeeding sections

In summary, ECCSA sees that there is little in these reasons to justify a step change in opex of the size requested by ElectraNet. ElectraNet is seeking an annual average 40% increase in opex for AA4 over the annual average of actual and forecast opex incurred in AA3. For comparative purposes, annual average AA3 opex was 20% higher than actual annual average opex in AA2

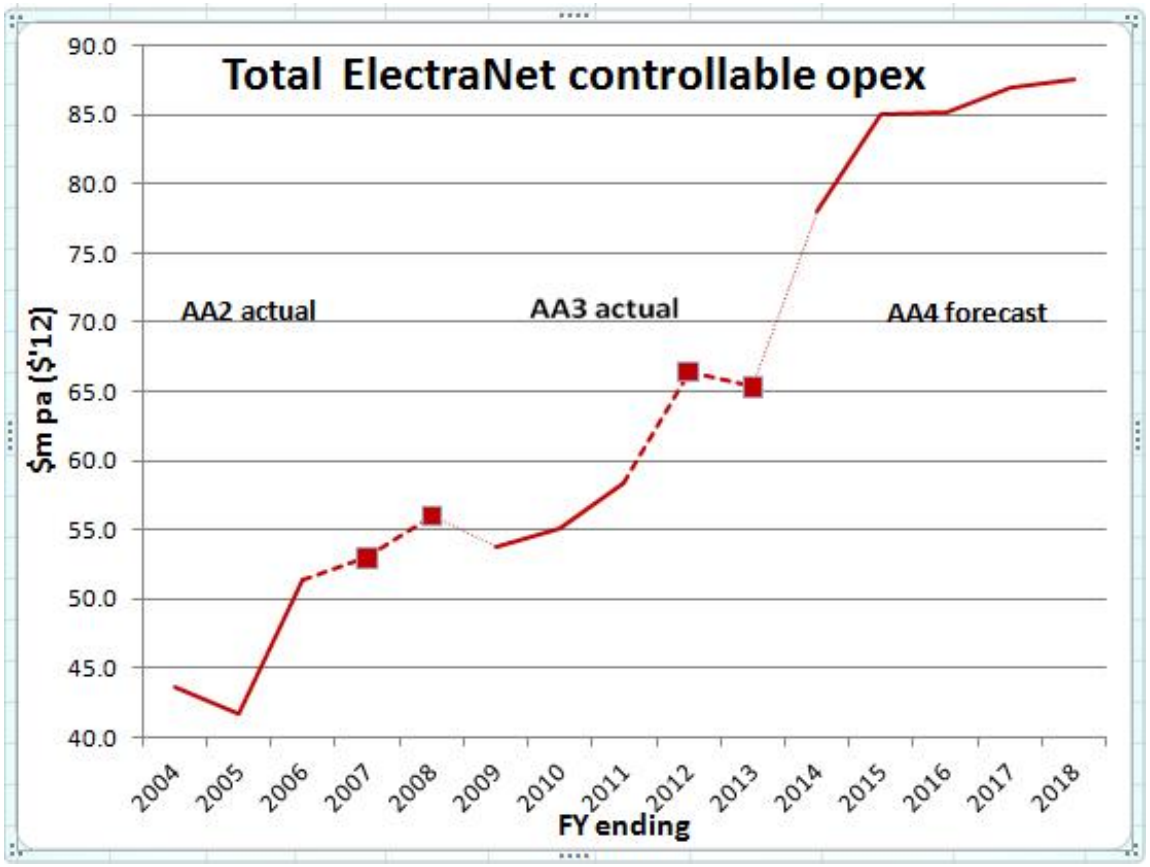
The opex incentive scheme (EBSS) is designed fundamentally to provide a driver for a regulated firm to achieve efficient opex. In the varying environment that a regulated firm operates in it is a fundamental matter that this opex be referred to a benchmark(s) which can demonstrate that efficient opex has been achieved. ElectraNet has determined that it achieved optimum opex efficiency in year 2011/12, and uses this as the basis for developing its forecast needs of opex.

The ECCSA totally rejects the concept that a single year opex can be used as the "efficient" basis for opex, and believes that a range of benchmarks need to be identified in order to demonstrate an efficient opex level. In this regard, it is

pleasing that the AER seems to have recognised this in its proposed network regulation rule changes currently under review by the AEMC.

5.1 An overview of AA4 opex

The following chart has been developed from data in ElectraNet's application 2007, the ACCC final decision on ElectraNet 2008 and the ElectraNet proposal of 2012. Forecast total opex claims from ElectraNet average $85m pa for AA4, whereas current total opex in AA3 averages (assuming the two last years' estimates are valid) about $60m pa. In AA2 annual average opex averaged under $50m pa.



Source: ElectraNet applics (2007, 2012), AER FD 2008

ElectraNet claims an average controllable[9] opex increase of $25m (real) pa for the next five years over the current level of opex. This opex increase adds nearly $2/MWh to the average tariff.

[9] Controllable opex excludes network support (an annual average of $8.3m), and equity, self insurance costs (an annual average of $1.5m) and debt raising costs (an annual average of $1.2m) – these figures are provided are in "real" terms.

To develop its forecast controllable opex, ElectraNet has based its forecast on its expected opex for 2011/12, even though this is, in part, a forecast. This estimate is the highest annual opex cost in AA3 (even the forecast for year 5 is lower than that of year 4). Assuming the forecasts are correct, the average annual opex for AA3 is $60m pa, 10% lower than the opex used as the base.

This reinforces concern about the practice of using a known year as the base year for future opex claims as the practice encourages "gaming" of the system. The ECCSA considers that (as does now, apparently, the AER) using the average opex over the regulatory period, provides a more representative value for opex to use as the basis for forecasting future opex.

ElectraNet advises (table 6.5) that its actual expenditure for 2011/12 will be higher than the AER allowance for 2011/12 of $62.1m but provides no reasons for this occurring, further reinforcing ECCSA concerns

ElectraNet advises that it proposes to set its opex based on some base year costs and some "zero based" costs, as detailed in figure 6.3

Table 6.3: Operating expenditure cost category forecasting approach

Operating Expenditure Category	Base Year Extrapolated	Zero Based
Routine Maintenance		✓
Corrective Maintenance*	✓	✓
Operational Refurbishment		✓
Network Optimisation		✓
Maintenance Support	✓	
Operations	✓	
Asset Management Support	✓	
Corporate Support	✓	
Insurances		✓
Network Support		✓
Debt Raising		✓

* hybrid approach utilising zero base forecast of current incoming corrective effort extrapolated

When calculated this means that only half of the controllable opex costs are assessed based on past performance – the other half of the opex is based on a bottom up assessment without reference to past performance. This raises serious concerns about the use of the EBSS to drive opex to efficient levels.

In its response to the ElectraNet application for is revenue reset for AA3, ECCSA commented that it did not support the approach to having part of the opex allowances calculated using a base year approach and the balance calculated

using a "zero base" approach. The AER, in its final decision, permitted this practice and attempted to rationalize this decision. The ECCSA does not see that the AER arguments are valid, as the regulatory approach is designed to reach efficient levels for opex. The continual use of "zero based" calculations removes the comparisons essential to ensure that allowances are efficient. As the EBSS is designed to incentivise more efficient opex, exclusion of half the opex from this driver, reduces the value of the incentive program.

5.1.1 Base year adjusted elements

Of the four elements fully based on historic performance[10], over the five year period, the average annual cost was $32.46m and the base year cost was $34.2m, a premium of 5%. The annual average cost for these elements in AA4 is $39.0m, an increase of 20% above the annual average of AA3. As these costs are all "real" the expected real wage cost premiums only support half this increase.

Of the four base year adjusted elements, maintenance support increases by 44% from the annual average rate of $9.7m pa to $14m pa yet the reasons for this large step increase are not explained although in table 6.9, ElectraNet does highlight that maintenance support would be 25% affected by a scale factor. A scale factor influence of this size would not justify the massive step increase sought!

The ECCSA is very concerned about the limited number of opex elements that are adjusted by using the base year costs and sees that ElectraNet needs to make it clear how these base year costs have been increased to the new values used

5.1.2 Zero based opex

There are four key elements of the opex that are calculated on a "zero basis" or bottom up assessment – routine maintenance, corrective maintenance, operational refurbishment and network optimization. Of these, network optimization (an average annual cost of $$2.7m pa) is a new cost element that has been added.

The average annual cost for these elements (excluding network optimization) was $27.3m pa but, in the base year, they were at an annual cost of $32.3m – a premium of 18%. The annual average cost forecast for AA4 for these elements is $42.9m, a step increase of nearly 60% above the average for AA3, and an increase of 33% above the base year costs.

[10] Maintenance support, network operations, asset management support and corporate support

ElectraNet advises that it expects to spend an additional $8m above the costs from the base year for (pp 97, 98):

- "Routine maintenance – increased lines aerial inspection resulting from the implementation of condition-based maintenance plans to improve the management of fire start risk, and increased regulatory vegetation clearance requirements;
- Corrective maintenance – ongoing increase in lines maintenance effort and large scale corrective projects to manage revelase asset risk identified through improved condition and risk; and
- Operational refurbishment – expanding condition assessment, asset refurbishment and replacement requirements to manage high priority line asset risks."

In its application for AA3, ElectraNet argued that it needed to approach maintenance (routine and corrective) under a different regime that substantiated its approach to one of a zero base. It argued that its new (more expensive) approach would result in work based on condition monitoring which would reduce the need for corrective maintenance and tie into its capex replacement program. It seems that ElectraNet is using the same arguments to substantiate a bottom up approach (giving it greater opex) that it used in 2007. The ECCSA does not consider that the AER should again allow a move away from the benchmark costs for AA4.

The annual average cost for routine maintenance in AA3 was $11.6m pa and is forecast to rise by 40% to an annual average cost of $16.2m pa. ElectraNet notes that the increase in routine maintenance cost results from an increase in inspections driven by the implementation of its new (included in AA3 costs) condition-based maintenance plan. The ECCSA finds it difficult to accept that there are even more inspections in AA4 than occurred in AA3, as ElectraNet does not advise that it is introducing new requirements.

ElectraNet does observe that it faces increased regulatory vegetation clearance yet it does not advise what these are and what the impact of the change is. What is known is that for decades, there has been a need for clearing of vegetation from powerline routes to prevent damage to the powerlines and the potential of flashover.

The increased in routine maintenance allowed in AA3 was in part to reduce the need for corrective maintenance. What has been seen over AA3 was a relatively steady annual average cost of about $9m pa for corrective

maintenance which was to reduce with better condition monitoring – that was the argument for increasing routine maintenance. However, corrective maintenance is forecast to increase to an annual average cost of nearly $14m pa, a step increase of more than 50%. The ECCSA does not consider that the investment in improved condition monitoring should result in increased corrective maintenance and should have delivered a reduction as was the argument proposed by ElectraNet in 2007.

Operational refurbishment was not a cost element in the 2007 application for AA3. Presumably it is either a subset of field support or field maintenance included in the AA3 application. It is therefore difficult to relate the arguments for increase opex from the AA3 application. However, what is clear from the forecasts is that operational refurbishment cost an annual average of $7m pa in AA3 and is forecast to nearly double to $13m pa in AA4. As with the corrective maintenance cost, the ECCSA would have expected that this cost element would have reduced, rather than increase.

ElectraNet has added a new opex element of network optimization. This is not an imposed requirement but is a new element designed to provide a network that should either reduce costs (future opex and capex) and/or increase availability. While the ECCSA supports such actions, it queries why they have not been a consistent part of the ElectraNet activities as to a reasonable degree they have the same focus as the STPIS which has been in operation for a considerable period. ElectraNet needs to quantify the benefit that this added program will achieve so that the added cost can be offset against benefits before the AER should include the additional cost

The following table summarizes the movements in average annual costs between AA3 and AA4

Cost element	2011/12 base	AA3 average annual	AA4 average annual	Increase AA3 to AA44
Routine maintenance	$13.4m	$11.6m	$16.2m	40%
Corrective maintenance	$11.9m	$8.6	$13.8m	60%
Operational refurbishment	$7m	$7.2m	$13.0m	80%
Network optimization	0	0	$2.7m	
Total	$32.3m	$27.4m	$45.7m	67%

Source: ElectraNet application

This table clearly shows that ElectraNet costs for AA4 far exceed the AA3 costs even after allowing for increases in scale and real labour cost escalation.

The increase in costs allowed from AA2 to AA3 included a large contribution to enable a better management of the assets and to reduce the need for "breakdown" maintenance. To this was coupled a capex program that enabled replacement of assets that was needed for high maintenance to keep them reliably operational. ElectraNet elected to underspend on replacement capex implying that there was not a driving need for significant replacement of assets. In the capex program for AA4, ElectraNet has introduced a considerable increase in replacement and refurbishment. The combined impact of the asset replacement in AA3 and that planned for AA4 should result in a reduction in opex, yet what is seen is a significant increase. There is an essential inconsistency in the ElectraNet controllable opex program.

5.2 Non-controllable opex

ElectraNet has advised that costs for self insurance, network support and debt raising are non-controllable costs.

The forecast for self insurance replicates the costs seen in AA3 and the ECCSA accepts these.

The AER has an approach for assessing reasonable debt raising costs which it has applied in previous years. ECCSA is intrigued that there were no debt raising costs recorded in AA3 and assumes that these were included in the corporate support costs. However, as corporate support costs show an annual average increase of 16% between AA3 and AA4, the ECCSA is concerned that acceptance of the debt raising costs as a separate line item costs implies that the increase in corporate support costs is much higher and on a comparative basis will be an annual average cost of $8m (corporate support of $6.78m plus $1.26m), implying that corporate support costs have increased by 37% which is excessive. The ECCSA considers that the separate line item for debt raising needs to be assessed in conjunction with corporate support costs and not separately, especially as ElectraNet has assessed AA4 corporate support based on the "efficient year" costs.

Network support costs show an increase of 32% from the average annual cost of $6.3m pa in AA3 to AA4. The reasons for this step increase need to be assessed to ensure that these are appropriate costs.

ElectraNet shows a significant increase in land tax obligations. ECCSA assumes that this is related to the dramatic increase in land acquisition included in the capex. As noted in the section on capex, the AER needs to evaluate carefully why there is this sudden increase in land acquisition and whether this program is efficient.

5.3 External benchmarking

ElectraNet provides little justification other than figure 6.6 for its proposed increases in opex by use of external benchmarking.

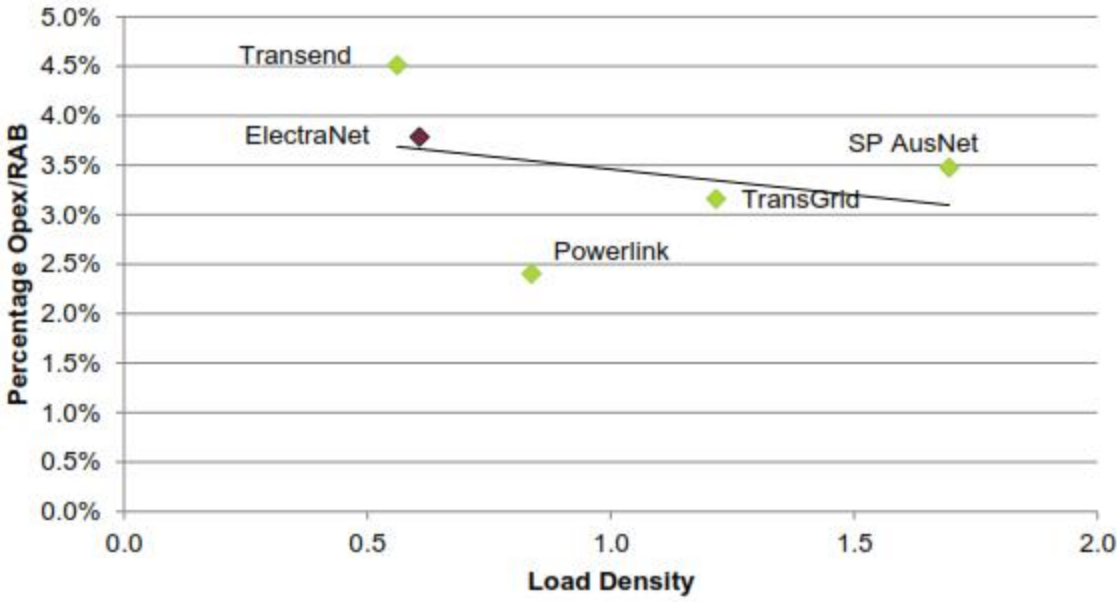


Figure 6.6: Forecast Operating Expenditure as a proportion of RAB 2013-14[87]

Whilst this is one tool used for benchmarking, it suffers from a number of drawbacks, particularly as it is related to the regulatory asset base – the higher the RAB, the better the apparent performance and the higher the non-controllable opex the lower the apparent performance. Considerably more external benchmarking is required to demonstrate that the ElectraNet forecast opex is efficient. Self benchmarking from AA3 to AA4 provides a prima facie case that AA4 opex is not efficient despite the chart provided.

5.4 Concluding observations on opex

ElectraNet has carried out a “bottom up” development for about half of its controllable opex. There is no reality test on the outcome of this process to demonstrate that the amounts are efficient. While the AER permitted this to occur for the allowance for AA3, the ECCSA considers that its continued use is inappropriate and reduces the effectiveness of the opex incentive scheme.

The very large increase in opex between AA3 and AA4 results in more than a 10% increase in the average tariff. This increase will impose increasing difficulty in consumers' ability to pay.

This increase must also be seen in light of the very large increase consumers paid with large step increase consumers saw of tariffs between AA2 and AA3. Such continued large step increases against a falling consumption and very low growth in peak demand needs to be examined in detail by the AER.

It is the role of the AER to provide a reality check on the claims by ElectraNet, and to assess whether the increases are reasonable. However, ECCSA does not accept that ElectraNet's claims are supportable or robust.

6. ElectraNet Capex

ElectraNet has sought capex of $894m over the next five years in its application for period AA4. In addition, it has flagged another $1406m for contingent projects. The amount of capex for AA4 is similar to that actually incurred in period AA3. The actual capex for AA3 included for the addition of some contingent projects valued at $947m that had been indicated in the application for AA3.

Of concern is that a number of contingent projects nominated for AA3 are repeated in the application for AA4 but the costs for the projects have increased dramatically. For example in AA4 the Eyre Peninsula reinforcement has increased by some 5 times above what was included in AA3 and the Riverland reinforcement has increased from $130m to $407m. That such projects can increase in cost over such a short time needs close attention by the AER to ensure that the values for these contingent projects are not being unnecessarily inflated.

6.1 An overview of AA4 capex

In its application for capex for the current period (AA3) ElectraNet cited a number of critical aspects that drew on the need for a significantly increased capex allowance – much of which the AER allowed.

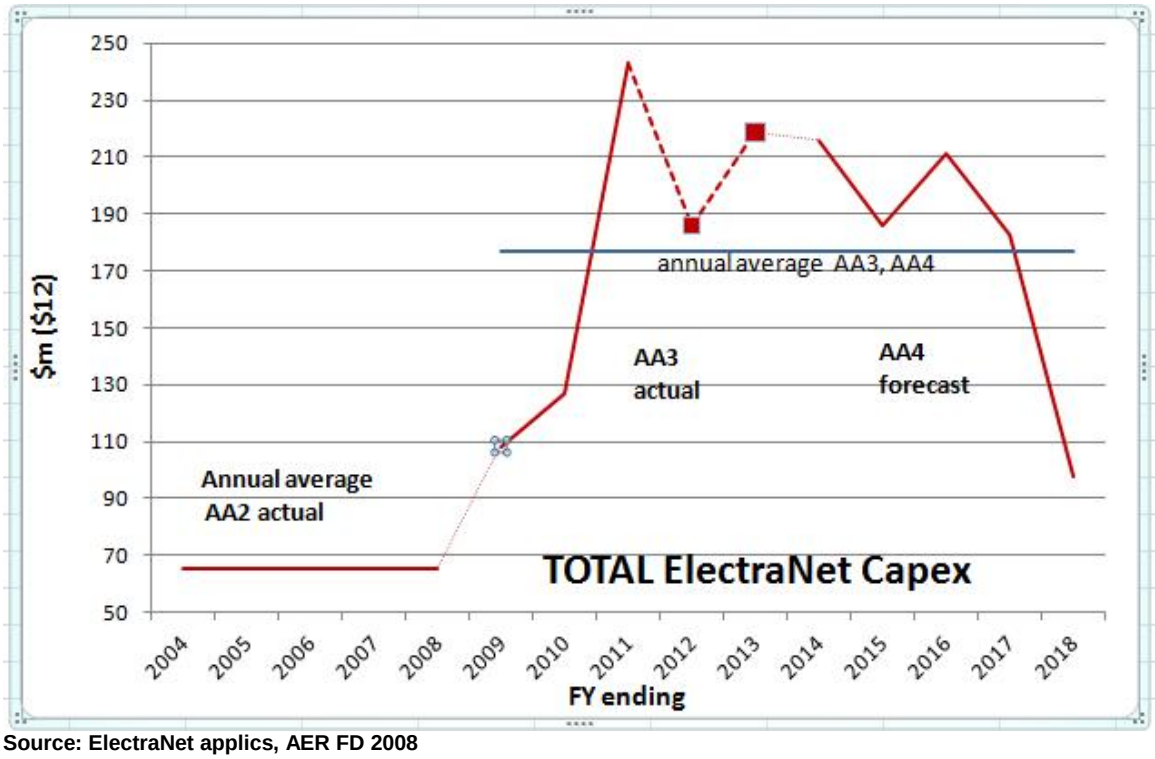
In its application for AA3 ElectraNet advised (pp16, 17):

> "A number of cost drivers will increase efficient transmission costs in the forthcoming regulatory period including:
>
> - The combination of demand growth and new mandated reliability standards – in formulating its investment and expenditure plans, ElectraNet must comply with the reliability standards mandated in the Rules and the recently updated ETC;
> - Assets nearing the end of their useful lives – South Australia now has one of the oldest networks in Australia. Assets aged over 40 years account for approximately 35 per cent of replacement value. The need for higher levels of investment to prudently address risks associated with an increasing number of assets nearing the end of their useful lives has been recognised by a number of ElectraNet's stakeholders;
> - Higher input costs including wages growth and the rising price of copper, aluminium, steel and transmission plant and equipment; and
> - Additional investment required to address concerns about the physical security of critical infrastructure."

In its current application, ElectraNet comments that its capex program is driven by (page 51)

> "The key drivers contributing to the levels of forecast capital expenditure are:
>
> - continuing growth in peak demand and strengthened ETC delivery requirements, which drive the need for ongoing transmission investment to meet mandated reliability standards;
> - an increase in the volume of assets nearing the end of their useful lives, which requires increased levels of asset replacement expenditure;
> - additional investment required to refurbish and extend the life of transmission lines based on asset condition and risk mitigation;
> - an increase in land and easement acquisition requirements in order to secure land and easements in a timely and prudent manner, to meet emerging new transmission line investment needs; and
> - real wages growth and related cost pressures caused by a projected strengthening employment demand in the mining and construction sectors in South Australia. "

It seems as if nothing has changed despite the acknowledged significant increase in capex for AA3 above AA2 levels. ElectraNet is seeking a similar amount of capex for AA4 (in real terms) that it sought for AA3. This is shown in the following chart



Source: ElectraNet applics, AER FD 2008

As a general observation, the ECCSA considers that the reasons for the large step increase in capex from AA2 to AA3 was driven by two unique features – the requirement to provide greater security to Adelaide CBD and to manage the imposition of increased input reliability standards. Neither of these applies for period AA4. This implies that capex for AA4 should return to levels similar to those of AA2 before these two unique and non-repeatable requirements applied.

ECSA also notes that a significant amount of the capex for AA3 was attributable to increasing input costs for which the AER provided considerable additional capex allowance. In practice, with the global financial crisis, input costs reduced considerably and the exchange rate soared, providing ElectraNet a distinct commercial benefit and the ability to introduce more assets for the same capital cost. This needs to be noted by the AER as it examines the detail of the historic investment in AA3 and sets the allowance for the future period AA4.

6.2 The delivery of capex for AA3

As now seems to be the norm for regulated firms, the capex allowance provided by the regulator is “gamed” in that actual costs in the early years are less than allowances and costs in the later years exceed allowances. This provides the regulated firm with the argument that future capex needs to equate with the high expenditure late in the period

Of equal concern, is that the deferment of capex to late in the period provides an avenue for the regulated firm to receive higher revenue allowances without incurring the costs that the revenue was based on. ElectraNet has been no different. Its actual costs tended to be less than allowances in the early years and capex was increased above allowances in the final years.

The benefit that ElectraNet achieved during AA3 by deferring capex cost consumers over $50m in providing a return for assets that were not provided until later than the AER had assumed in developing its timing of capex during AA3. In its application for capex for AA3, ElectraNet forecast a capex program that was high in the early years and reduced in the latter years, and the AER final decision reflected this profile.

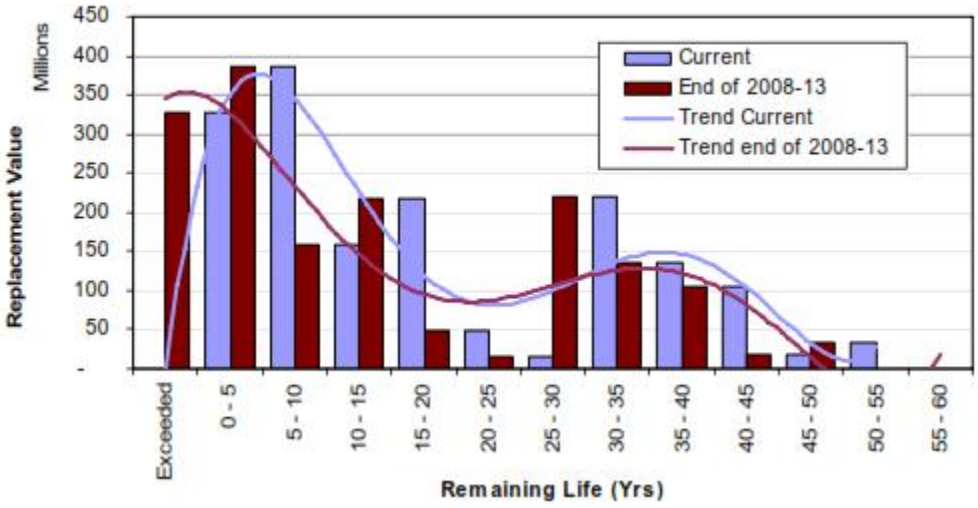
ECCSA notes that ElectraNet has again provided a capex requirement profile for AA4 that is high in the early years and falls in the later years. The ECCSA is of the view that ElectraNet will endeavor to defer capex until later in the period so that it gains the benefit from deferring capex again. As the benefit that ElectraNet gains from this practice is a cost to consumers, the AER needs to ensure that the allowed capex program does not permit this practice.

6.3 Asset replacement capex for AA4

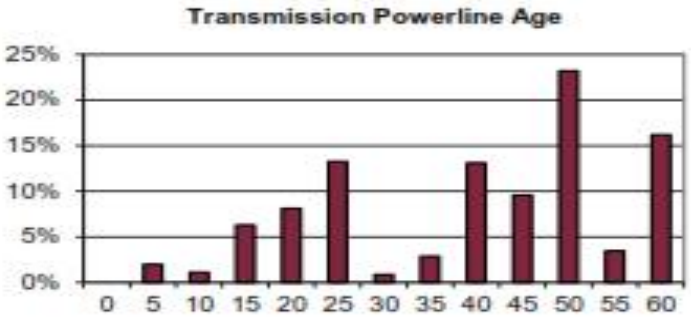
Despite ElectraNet's comments about its need to expend considerably in AA3 on replacement because of ageing assets, ElectraNet actually used 15% less on replacement than it forecast for AA3. For AA4, ElectraNet is proposing to devote over half of its capex to replacement and refurbishment, which is nearly double what it applied to replacement of assets in AA3. The ECCSA is concerned that this large step increase in capex for replacement and refurbishment is not warranted to the extent that ElectraNet alleges.

Examining the age of profile of transformers and powerline assets provided in the application for AA3, shows that ElectraNet has the ability (especially with lightly used assets) to keep older assets in service longer than their depreciation lives. This can be seen by comparing the age profile of assets provided in the application for AA3 and the application for AA4. In application for AA3 ElectraNet provided the following chart for powerlines

Figure 3.6: Transmission line remnant life profile.



In the application for AA4, a similar chart (figure 3.6) shows (although it does not show the remnant life but actual age)



There are three interesting features when comparing the two charts. In the comparisons it is important to note that there is a five year shift in the timing of the charts although the AA3 application does provide a view as to what the profile will look like at the start of AA4.

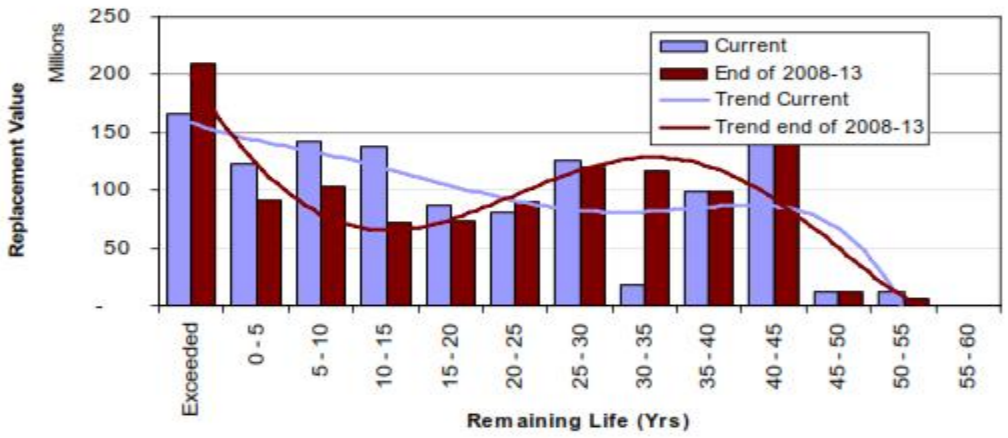
Firstly, there seems to be inconsistency between the two, as the chart in the application for AA4 does not seem to equate well with the forecast made in the application for AA3 of the asset age shown in figure 3.6 of the application for AA4.

Secondly, and more importantly, there is a distinct change in proportion of younger assets and older assets with few assets of “middle age”.

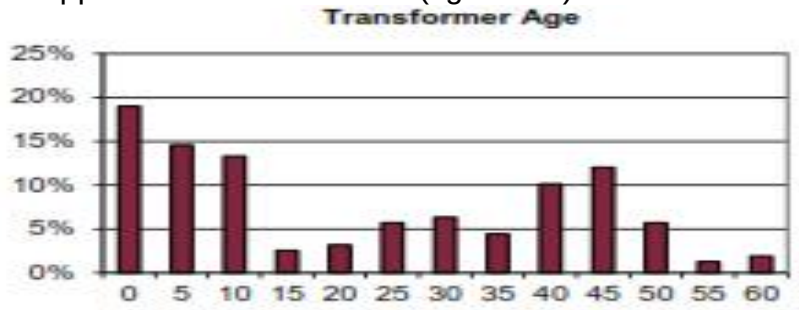
Thirdly, powerline assets are considered to have an economic life of 55 years (see depreciation schedule) but it is quite apparent that certain assets have a used and useful life longer than this, especially those more lightly loaded and in less aggressive environments.

In the case of substation assets, similar comparisons between the data from the two applications can be made. The application for AA3 provides the following figure.

Figure 3.7: Substation and other assets remnant life profile.



The application for AA4 shows (figure 3.6)



The comparison between the charts is more stark in the case of substation assets and transformers, especially in the “very young” and middle age groups where there is a distinct lack of correlation. Whereas the application for AA3 implies that there is a more even age profile of asset life, the application for AA4 shows there are less assets in middle age (compared to AA3) and a significantly higher proportion of assets in the 1-10 age group then was indicated for AA3.

Overall, the ECCSA considers that there is sufficient inconsistency between the information provided by ElectraNet that it needs to be resolved, especially as ElectraNet is seeking such a large increase in replacement and refurbishment assets for AA4.

The ECCSA also considers that the retention of lightly loaded but more aged assets should be retained where possible in order to smooth out the age profiles. Replacing assets that are fully depreciated will result in the replication in the future of the currently seen uneven age profiles and impose on future consumers large costs for replacement of large amounts of assets as they reach “retirement”. Careful life extension of older assets now will provide a benefit to future consumers and minimize costs for current consumers.

ECCSA considers that the AER needs to more closely examine the structure of the replacement and refurbishment program in light of the experiences during AA3 where ElectraNet was able to reduce replacement capex below that allowed and not incur such a large step increase in replacement capex.

6.3 Growth capex

ElectraNet used 15% more capex on growth assets yet the actual growth in demand did not match the expectation and forecasts continue to show that future growth will be minimal (see section 2.1 above). The implication of this is that ElectraNet will have used considerable amounts of capex for growth that has not occurred and unlikely to be so during AA4. Included in the ElectraNet proposal for AA3 was a significant component of capex for augmenting the Adelaide CBD supplies which is now completed and used over 20% of the total capex for AA3. .

ElectraNet has identified that its growth capex for AA4 will be considerably less than incurred in AA3, to about one third of the growth capex incurred for AA3. This reduction needs to be seen in context.

For AA3 there was a forecast of significant growth in peak demand yet this did not eventuate (see section 2.1 above). Despite this ElectraNet is still forecasting significant growth and based its forecast capex to provide for this. In fact, growth in peak demand will remain minimal according to AEMO and is unlikely to exceed the peak demand recorded in 2011 until the end of period AA4.

The clear implication of this is that there is little need for any capex in AA4 to address growth over the next 5 years. The AER needs to closely review those projects identified as needed to accommodate growth and to ensure consumers are not required to fund capex that is not needed.

Included in the growth capex is some $1406m for contingent projects. The ECCSA considers that the AER should carry out an indepth analysis of these contingent projects and eliminate those for which the expected growth in demand makes unnecessary for period AA4.

In particular, the ECCSA is most concerned about the contingent projects for reinforcement on the Eyre Peninsula which comprise over 50% of the total of the contingent projects and for the Riverland reinforcement that comprises 30% of the cost of contingent projects. ECCSA has a basic concern that the cost of the projects compared to the amount of additional load that will be managed would appear to be excessive. The AER should ensure that, even if there is a requirement to satisfactorily show the benefit exceeds cost by use of the RIT-T, there is a basic assessment that such a project at the cost implied is warranted. To include contingent projects in the approval process at inflated costs should not be permitted.

6.4 Land acquisition capex

The AER allowed ElectraNet a total of $16m for the acquisition of land and easements for AA3. In fact, ElectraNet expects to incur twice this amount with almost all of the acquisitions occurring in the last two years of AA3. Based on this rate of acquisition ElectraNet forecasts that it will incur a further doubling of acquisition of land and easements in AA4.

ECCSA accepts that it is appropriate for ElectraNet to secure rights to land that it reasonably expects to require for future needs. What ECCSA is concerned about is that there has been a sudden growth in land and easement acquisition starting in 2011 and to incur an annual cost of some $12m pa for every year thereafter. In comparison, for the nine years prior to 2011, ElectraNet had seen little need to acquire large amounts of land and easements, expending perhaps less than $1m pa.

This recent need for a twelvefold increase in capex on land acquisition needs to be investigated and demonstrated that such a cost is necessary. This issue has an additional implication for consumers as land and easement costs are not depreciated and therefore become a long term source of revenue for ElectraNet as has been discussed in section 3.3 above

6.5 Other capex

A summary of the average annual capex for each element of the ElectraNet capex program is provided below.

$m ($'12)	Actual Average AA3	Forecast Average AA4	comments
Augmentation	72.36	23.58	Discussed above
Connection	25.18	26.64	
Replacement	47.48	79.6	Discussed above
Refurbishment	0	10.84	Discussed above
Strategic Land/Easements	5.96	13.16	Discussed above
Security/Compliance	12.52	11.46	
Inventory/Spares	3.16	3.68	
Total Network	**166.7**	**168.98**	
Business IT	8.32	8.74	
Building/Facilities	1.6	1.08	
Total Non-network	**9.9**	**9.86**	
TOTAL Capex	**176.64**	**178.82**	

Source: ElectraNet application table 5.12

The AA4 claims for connection, security/compliance, inventory/spares, business IT and Building/facilities all appear to be consistent with the actual costs incurred in AA3, and on this basis, the ECCSA sees that they are generally appropriate. Notwithstanding this general observation, ECCSA also notes that the averages for AA3 are quite heavily skewed in some cases by very large forecast capex for the last two years of AA3.

In particular, actual costs for security/compliance in the last two years of AA3 are 12 times the actual expenditure incurred in the first three years. The AER needs to investigate the reasons for this large step increase and be assured that there are legitimate reasons for this.

6.6 Concluding observations of capex

The amount of capex stated as required for augmentations and connections is not supported by any significant increases in consumption or demand. In fact, there is a significant reduction in the forecasts for peak demand and consumption and this is not being fully reflected in the growth capex of the contingent capex which are driven by growth.

The move to increase replacement and refurbishment needs to be modified so that there is less of the variation in asset age over the entire asset portfolio. This can be achieved by keeping the lightly loaded assets in service longer even if they have been fully depreciated.

The massive increase proposed for replacement and refurbishment of assets should be reflected in significant savings in opex yet this has not resulted in significant reductions in routine, corrective maintenance and maintenance support. As there is a reduction in growth assets being installed in AA4, the rate of increase in opex should be less than in AA3 where there was significant increase in growth assets, but the rate of increase in opex has increased.

ElectraNet has not identified where the network coverage has increased (which would result in increased opex) and where the augmentations are effectively replacements of existing assets with larger assets and opex would be expected to reduce as newer but larger assets are replacing older and smaller assets.

ElectraNet has increased its capex program for replacements yet none of these replacements has resulted in a reduction of opex, which would be expected as a new asset would require significantly less opex than an asset aged 40+ years.

7. Service standards

In its final decision in 2008, the AER determined the service standard performance incentive scheme (STPIS) would operate for ElectraNet under the following guidelines. In the five years 2007 to 2011, ElectraNet has earned a net $2.4m (or nearly $0.5m pa) from the STPIS, despite having the maximum penalty in every year for outage duration. In years 2007, 2009 and 2011 ElectraNet earned bonus from the STPIS but in 2010 earned neither a bonus nor penalty. In 2008, ElectraNet incurred a small penalty.

ECCSA notes that the 2012 performance will not be known until next year. The fact that ElectraNet has earned a net bonus so far implies that the targets and collars and caps are set at levels that are profitable to ElectraNet.

The AER set the STPIS on the following basis:

Table 6.3: Caps, collars, targets and weightings to apply to ElectraNet

Parameter	Recommended values			
	Collar	Target	Cap	Weighting
Circuit availability (%)				*MAR (%)*
Total transmission	99.10	99.47	99.63	0.3
Critical circuit peak	98.52	99.24	99.51	0.2
Critical circuit non-peak	98.88	99.62	99.95	0
Loss of supply event frequency (no.)				*MAR (%)*
> 0.05 (x) system minutes	11	8	6	0.1
> 0.2 (y) system minutes	6	4	2	0.2
Average outage duration (minutes)				*MAR (%)*
Total	119	78	38	0.2

ElectraNet has sought a small overall reduction in the AA4 targets because of its proposed capex program. In this regard, it must be noted that during AA3, ElectraNet had undertaken considerable new investment both in terms of replacement and augmentations. The capex for AA4 proposed by ElectraNet is of

a similar magnitude although more is devoted to replacement than to augmentation.

ElectraNet is also seeking a biasing of the collar (penalty) so that lower performance is penalized at a lesser rate than the better performance. While it is accepted that imposing a cap in excess of 100% leads to an impossible outcome, extending the collar to two standard deviations reduces the rate of penalty.

The ECCSA considers that from a consumer's point of view, imposing less of a penalty for lesser performance does not reflect that the damage to consumers increases with lower performance. On this basis believes that the basis of the STPIS must be symmetrical, so if only one SD is possible for the cap, this same one SD should apply to the collar. In this regard, it is recognized that once the collar is reached, ElectraNet suffers no more financial detriment (and therefore limit their risk), but consumers continue to suffer increasingly as performance below the collar continues to reduce.

ECCSA also notes that ElectraNet wants to vary the weightings of the six elements, halving the weighting on availability at critical times and increasing the outage duration by 50%. The ECCSA does not agree with this. Consumers seek maximum availability at peak periods (ie critical time availability) so biasing the incentive program away from this key input element might not be in consumers' best interests.

Examination of the actual performance of the outage durations shows that 2007 and 2011 were significantly high and cause the five year average performance to be 202 minutes. However, in three of the years, ElectraNet would have earned a significant bonus if the new target was in place. Performance on outage duration resulted in each year of the maximum penalty for failure to meet this target yet in only one year, did ElectraNet incur a penalty because of this poor performance. Setting the target for outage duration at 202 minutes would significantly increase the potential for ElectraNet to earn a bonus on this element. Excluding the two bad years (2007 and 2011) shows that outage durations were about 160 minutes. Even including the poor performance of 2011 results in an average for the three and a half years of performance for AA3 gives an outage duration of 185 minutes. ECCSA is very concerned that the change to increase the allowance coupled with an increase in the weighting will provide ElectraNet with a considerably increased STPIS bonus.

The ECCSA is concerned also that, on an overall basis, retaining the same (or slightly reduced) targets, ElectraNet will again earn significant bonuses from the STPIS. This bonus earning power will be further enhanced by the biasing of the penalty on availability to two SDs but having only one SD to earn a bonus. The

ECCSA is of the view that ElectraNet has to earn any bonus and not receive one by maintaining the same performance.

ElectraNet proposes that its performance targets should be:

Table 10.5: Proposed values, weightings and other scheme elements

Parameter	Sub Parameter	Performance target	Cap (upper limit)	Collar (lower limit)	Weighting (%MAR)
Transmission Circuit Availability	Transmission Circuit Availability (%)	99.50	99.76	98.98	0.3
	Critical Circuit Availability Peak (%)	99.13	99.95	97.47	0.1
	Critical Circuit Availability Non-Peak (%)	99.62	99.81	99.25	0
Loss of Supply Event Frequency	Events > x System Minutes	7	4	9	0.1
	Events > y System Minutes	2	1	4	0.2
Average Outage	Duration (minutes)	202.60	80.73	324.47	0.3
Market Impact	Dispatch Intervals	1588	0	1588	2

Notes: x = 0.05 and y = 0.2
Critical circuits as defined in STPIS Guideline Appendix B Part 1
Peak is defined as 8am to 8pm Monday to Friday
Non-Peak is defined as all other times

ECCSA does not accept the changes proposed by ElectraNet and is of the view that because the AER-set targets for AA3 have resulted in an overall bonus being paid, that the AER targets should be made a little higher to provide a challenge to earn a bonus.

ECCSA does not accept the asymmetry proposed by ElectraNet. There are two reasons for this.

1. ElectraNet has set its targets such that it is more likely to achieve the target performance than not. Analysis of the historic performance to date indicates that there are more “success” points than not
2. Whilst performance to date has been very good, an incentive scheme is designed to operate on two fronts – one is to encourage out performance and the other is to penalize poor performance.

ECCSA notes that the Market Impact Performance bonus provides an incentive to TNSPs to minimize congestion in the network. ElectraNet advises that in the past five years (2007-2011) the average dispatch periods where congestion occurred was 1588 5-minute dispatch intervals and proposes this should apply for AA4.

ECCSA has some considerable concern with this setting. The historic performance was based on periods where the peak demands were where the highest in SA, reaching 3385 MW in 2011. The AEMO forecast for peak demand during AA4 is significantly below the levels experienced in AA3 and therefore it would appear that the likelihood for congestion will be significantly eased. To apply a benchmark (which is subject only to receive a bonus) when the expectation is that there will be significantly less potential for congestion, is not in the interests of consumers. The AER needs to examine this aspect in considerable detail to ensure it does not result in ElectraNet getting an unearned bonus, especially one that can reach 2% of the MAR.