# RESPONSE TO AER DRAFT DETERMINATION RE: ACTEWAGL REGULATORY PROPOSAL 2014-19

From Consumer Challenge Panel, February 2015

#### **Abstract**

This submission is a response to the AER's draft determinations for ActewAGL distribution and transmission network businesses, and some aspects of subsequent revised proposals. The submission also builds on the sub panel's response to the initial ActewAGL regulatory proposal.

1	C	Context	2
	1.1	Our role	2
	1.2	Consumer experience	2
	1.3	Basis for 2014-19 ACT network regulation	5
	1.4	The new reality	8
	1.5	The AER draft determination	9
	1.6	Transition	10
	1.7	Benchmarking	10
	1.8	Response by ActewAGL to the draft determination	10
	1.9	Consumer engagement work by ActewAGL	11
2	Τ	Taking account of consumer views	12
	2.1	Consumer engagement - ActewAGL	12
	2.2	Reliability and Willingness To Pay (WTP)	15
3	S	Standard Control	19
	3.1	CAPEX	19
	3.2	Step Changes	19
4	A	Alternate Control Services	19
	4.1	Public Lighting	19
	4.2	Metering	19
	4.3	Ancillary network services	19
5	R	Responses to AER draft determination – changes needed for Final Determination:	20
	5.1	Does the AER's decision jeopardise safety or reliability?	20
	5.2	Is the allowance for debt funding reasonable?	22
	5.3	Is the cost of equity adequate?	23
	5.4	Rate of return	24
	5.5	Is the allowance for tax reasonable?	26
	5.6	Is the AER's benchmarking of opex reasonable?	26
	5	5.6.1 Econometric modeling of opex	28
	5	5.6.2 Vegetation management	32
	5	5.6.3 Reliability	33
	5.7	Incentive payments	34
6	Is	s a transition necessary?	35
7	S	Summary of main points	.377

#### 1 Context

In this chapter, we set out our broad, high-level response to the AER draft determination for the ActewAGL electricity distribution business and some of the responses from them to the draft determination. We set out more detailed comments to specific parts of the determination in subsequent chapters and include new data that provides relevant context. In following sections we also make reference, where appropriate, to our previous written responses. We also have received correspondence from ActewAGL on 12<sup>th</sup> September, 2014 in response to our submission regarding the original regulatory proposal and a letter concerning consumer engagement, dated 28<sup>th</sup> January 2015, in response to a letter from us. We appreciate the willingness of ActewAGL to engage with us.

#### 1.1 Our role

Our primary duty as a Consumer Challenge Panel (CCP) is to consider the long-term interests of consumers. This means taking into account costs to consumers and other interests of consumers such as safety and reliability. To meet this duty we are required to provide challenge to the AER and the networks businesses.

The CCP is organised into sub panels in order to deal with the large number of regulatory proposals that the AER needs to consider. The sub panel considering the NSW and ACT distribution network proposals for 2014-19 has been referred to as sub panel 1 (CCP1). For the purposes of this submission, we mainly refer to ourselves as 'the sub panel', which for this submission consists of Mark Henley, Ruth Lavery, Bruce Mountain, and Gill Owen.

#### 1.2 Consumer experience

In our response to the original proposals, we provided data about the impacts on consumers of ongoing, substantial increases in electricity prices. Since that submission was presented, the AER has released its 2013-14 annual report on the performance of the retail energy market, which includes reporting on affordability issues, as required by the National Energy Customer Framework (NECF). Some of this data follows.

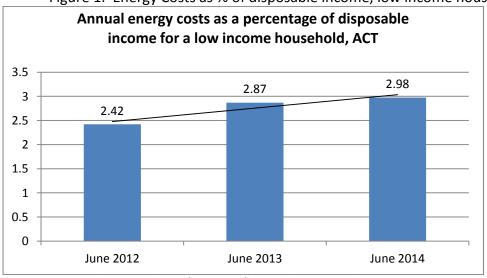


Figure 1. Energy Costs as % of disposable income, low income households.

Source: AER; Annual report on the performance of the retail energy market, 2013-14

Figure 1 data shows that the annual electricity cost as a proportion of disposable income continues to raise for lower income customers in ACT. The rise is not as steep as some other jurisdictions, but any increase is unacceptable. With ABS household expenditure survey data showing that the average household spends on electricity, Australia wide is 2.3%; low income ACT households are now having energy bills as a proportion of income being 30% more than the national, all households rate, despite declining electricity use.

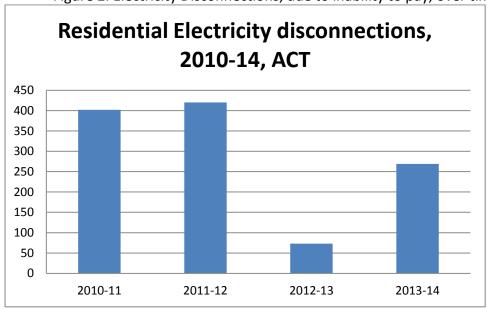


Figure 2. Electricity Disconnections, due to inability to pay, over time, ACT

Source: AER; Annual report on the performance of the retail energy market, 2013-14

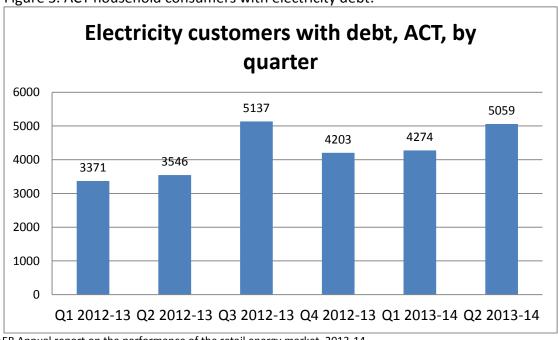


Figure 3. ACT household consumers with electricity debt.

Source; AER Annual report on the performance of the retail energy market, 2013-14

The number of households disconnected from supply, due to inability to pay is shown in figure 2, with numbers fluctuating significantly from year to year, 2013-14 disconnections

were significantly higher than the previous year, but lower than for 2011-12. A disconnection from electricity supply due to financial stress is a sobering example of the adverse impacts of rising electricity prices in ACT (see figure 6.). Figures 3 and 4 show electricity debt for ACT consumers, the trend here is for rising debt.

The retail energy market performance report shows that 16.45% of ACT household customers are requiring energy concessions to help them pay their bills and 36.06% of all customers disconnected were customers receiving concessions.

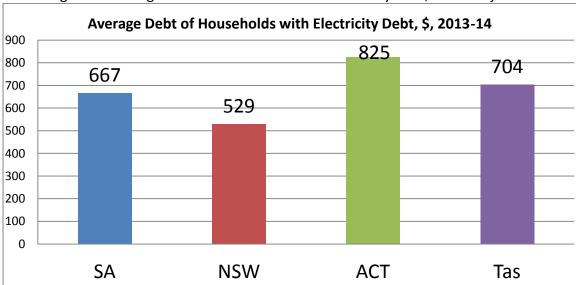


Figure 4. Average debt of households with electricity debt, selected jurisdictions

Source; AER Annual report on the performance of the retail energy market, 2013-14

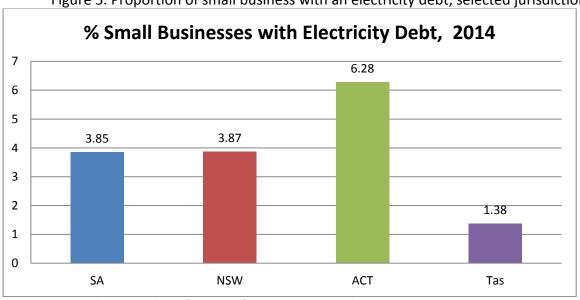


Figure 5. Proportion of small business with an electricity debt, selected jurisdictions

Source; AER Annual report on the performance of the retail energy market, 2013-14

There are also impacts of rising electricity costs on small business with the ACT having the highest proportion in Australia, of small businesses with electricity debt, Figure 5. The impacts of high and rising energy costs for small business must not be underestimated in terms of flow on economic and employment impacts for the ACT.

With significant numbers of households and businesses being disconnected, unable to pay bills on time, and increasing their electricity debt, it is counter-intuitive that there is widespread support for higher bills, a consequence of acceptance of the ActewAGL regulatory proposal.

And while consumers have struggled to pay their energy bills and ever higher numbers are being disconnected from supply, ActewAGL's profits have delivered significant pecuniary gains to their owners, refer tables 3 and 4 in section 5.1.

#### Basis for 2014-19 ACT network regulation 1.3

Prices paid by ACT customers have risen sharply during the most recent regulatory period, as shown in figure 6. Indeed, real electricity prices were relatively stable for an extended time, up to the commencement of the most recent regulatory period.

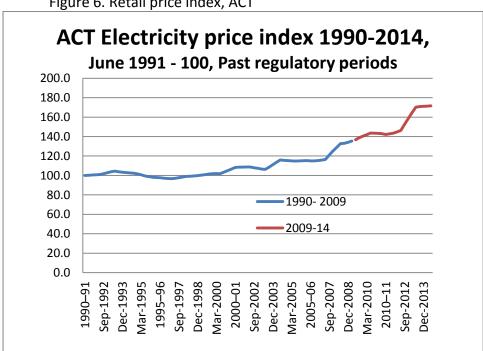


Figure 6. Retail price index, ACT

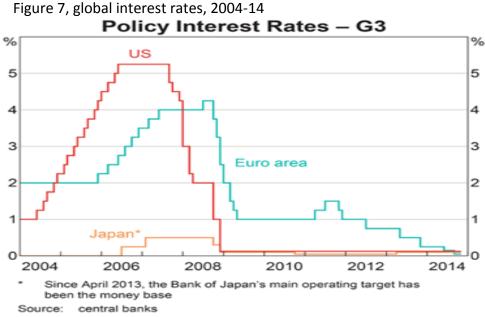
Source: Data from AER, State of the Energy market report, 2014.

Some commentary suggests that uncertainty related to the global financial crisis, may have been a factor<sup>1</sup>, for the generous allowances to ActewAGL at the last 're-set.' For example see Some Effects of the Global Financial Crisis on Australian Financial Markets, speech to Finance Professionals Forum, 31/3/2009 by Guy Debelle Assistant Governor (Financial Markets), Reserve Bank of Australia. There are also commentators who argue that even though borrowing rates for companies with good credit ratings did not change much, for example "Since mid 2007, issuance has continued to be concentrated among highly rated entities and, in fact, the distribution of issuance has shifted even more towards the highestrated entities. This reflects increased investor preference for low-risk financial assets"<sup>2</sup>, and we add, including energy network businesses; the perception of uncertainty may have been

<sup>&</sup>lt;sup>1</sup> http://www.rba.gov.au/speeches/2009/sp-ag-310309.html

<sup>&</sup>lt;sup>2</sup> http://www.rba.gov.au/publications/bulletin/2010/jun/pdf/bu-0610-8.pdf

a self fulfilling prophecy, and so the AER gave generous allowances for the 2009-14 regulatory period. Whatever the reason, the reality is that ActewAGL was allowed much greater revenue for the most recent regulatory period than ever before. Figures 8 shows revenue outcomes, from 1999 to 2014, proposed revenue, from the initial 2014-19 proposal, and the AER draft determination, to illustrate this observation.



Source: Reserve Bank of Australia: http://www.rba.gov.au/chart-pack/interest-rates.html#

Figure 7 shows that interest rates globally have come down substantially over recent years, particularly in the post Global Financial Crisis (GFC) period. The figure shows that, globally, we are experiencing a low interest environment and a low capital cost environment. Therefore, for the 2014-19 regulatory period raising capital on global capital markets, ActewAGL can expect to pay very low interest rates.

In making its final determinations for the 2014-19 regulatory period, the AER must regard the 2009-14 period as an 'outlier' period, with outcomes skewed by GFC uncertainty. Consequently, the base for considerations for this next regulatory period should be the more long term circumstances represented by the longer term, the previous decade up to 2009.

The key, total revenue figures for ActewAGL, for the four years, 2015-19 of the next regulatory period, as presented by the AER in their draft determination include:

- 1. \$892.0m: initial ActewAGL proposal sought, nominal, for distribution and transmission, 2015-19,
- 2. \$575.6m: the AER draft Determination
- 3. \$852.1m: the revised ActewAGL proposal

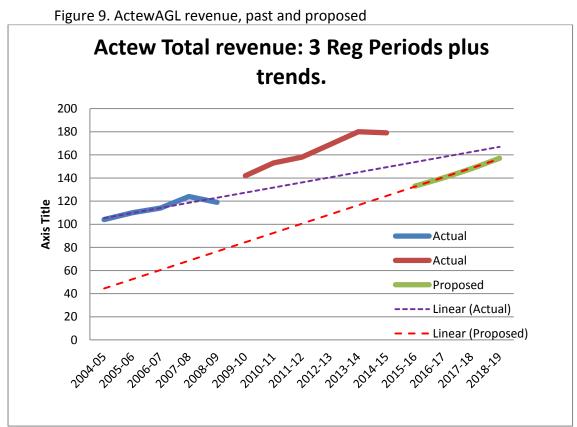
Putting the situation plainly, the ActewAGL revised revenue requirement is very similar to its original proposal, and does not take into account the dramatically lower interest rates that currently apply, nor the 'outlier' characteristics of the 2009-14 regulatory period, nor the analysis presented by the AER in making their draft determination.

Figure 8 shows total annual revenue for ActewAGL over the past 2 regulatory periods with the AER draft determination for 2014-19

**ActewAGL Total revenue: 3 Reg Periods** 200 180 160 140 120 100 Actual 80 60 Actual 40 20 Proposed 0

Figure 8. ActewAGL revenue, past and proposed

Source: AER Draft determination for ActewAGL



Source: AER Draft determination for ActewAGL

Figure 9 presents the same data as figure 8, but adds indicative, linear trend-lines for the 2004-9 period and the AER draft determination. Noting our earlier comments about the 2009-14 period needing to be regarded as an 'outlier' period, the indicative trend-lines show that the annual revenue, at the end of the 2015-19 period and applying the draft determination, would be very similar to the trend level from before 2009.

The AER's draft determination is close to a reasonable longer term trend revenue, and consequently the draft determination meets a "reasonableness test".

#### 1.4 The new reality

In our submission to the initial proposals by ActewAGL in 2014, we noted that there is a new reality facing distribution businesses (and indeed, others in the energy sector) and yet we saw limited evidence that the submissions (initial and revised) from ActewAGL reflect this new reality.

ActewAGL in writing to the sub panel disagreed with our view, saying that the limited response to the 'new reality' matters that we raised were dealt with "as part of ActewAGL Distributions ongoing network tariffs strategy" and as "a key step in the network augmentation process<sup>3</sup>."

We are not convinced that these responses do much beyond a "business as usual" approach. We are disappointed to note that this approach would appear to have persisted in the business' response to the AER's draft determination. Were the 'new reality' perspectives that we raised responded to more fully, we would have expected to see much greater emphasis, from ActewAGL, in reduced capex and opex bids in the revenue proposal and more focus on demand management instead of more network augmentation.

The new reality is a result of changes in demand and customer concerns about high electricity bills. Many consumers have already embraced solar and energy saving and thus need to use less - and will reasonably expect to pay less - for grid delivered electricity. These new forms of competition for grid delivered electricity would normally be expected to impact prices. We may see more consumers disconnecting completely particularly with the development and reduced costs of storage. Although most customers will want the security of connection for the foreseeable future, even this could change longer term, particularly if charges remain high.

Regulators are also expected to provide a surrogate for competition and so we consider that they too will have to adapt to and incorporate this new reality into their pricing determinations.

A business systemically responding to a 'new reality' would propose lower prices for consumers in a declining demand, declining cost of capital environment, not the ongoing price increases for end users proposed in the revenue proposals.

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<sup>&</sup>lt;sup>3</sup> Letter to sub panel, from ActewAGL, 12<sup>th</sup> September 2014

#### 1.5 The AER draft determination

Some of the key parameters are given in table 1, comparing the original ActewAGL proposal with AER draft determination, while figure 10 shows the changes in annual, total revenue for the 2015-19 period.

We consider that even if the business were to be allowed somewhat lower rates of return than those proposed by the AER, the revenue would still make ActewAGL highly attractive compared to businesses that operate in competitive markets, given the lower risks that this regulated business faces, for example, compared to businesses in competitive markets. We have based this view on our research on relevant factors including the appropriate cost of debt to be taken into account, see Section 4 for further discussion of this.

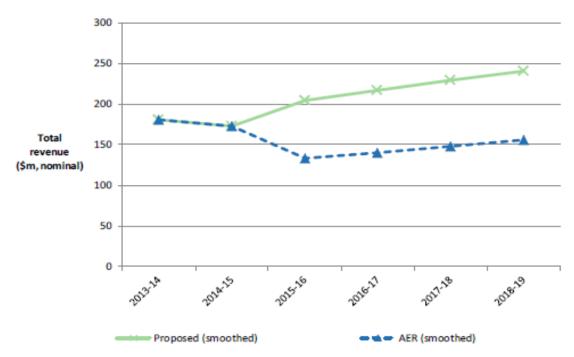
Table 1. Key parameters, ActewAGL proposed and AER Draft determination

	ActewAGL Bid	AER DD
Rate of Return	8.99%	6.88%
Opex	\$383.5m	\$222.6m
Capex	\$372.2m	\$244.2m
Ave Bill Impact	\$118pa	\$182pa
	(increase)	(decrease)

Source: AER Draft determination for ActewAGL

Figure 10, ActewAGL distribution revenue 2015-19, proposed and AER Draft determination.

Figure 7.3 AER's draft decision on expected revenues compared with ActewAGL's proposed expected revenues for 2014–19 – distribution and transmission (\$ million, nominal)



Source: AER Draft determination for ActewAGL

#### 1.6 Transition

We do not think there is a need for consumers to pay for a transition. This business has been very profitable and been allowed revenue levels far in excess of their costs of capital - these profitability levels should enable them to manage any transition without the need for any recourse to further increases in costs for customers.

See Section 5 for further discussion of this.

#### 1.7 Benchmarking

There are a number of different benchmarking approaches that might be used and no single methodology would be considered the optimum by every expert. Given this reality, we consider that an appropriate challenge for us was to assess whether the AER Methodology could be considered reasonable. We discussed the analysis with staff and the AER's consultants. We also considered Professor Newbery's critique. Having undertaken this work, we consider that the AER methodology represents a reasonable approach. We find no reason to criticise the overall approach taken by the AER, although we have some specific comments as set out in section 5. We therefore support the AER approach. See sections 5.6 and 5.7 for further discussion.

## 1.8 Response by ActewAGL to the draft determination

We do not support the concerns raised by ActewAGL that the AER allowed revenue will put at risk safety, reliability or job security. These concerns confuse the nature of the role of the AER. The AER does not tell the business how it should spend its total revenue allowance. The AER sets an overall limit and it is then a business management decision as to how that business apportions that revenue allowance between the various costs of the business. This includes the business decision on how much of the revenue allowance it will take in profit. So if a business, for example, wishes to spend more on safety, it might do so by spending less of its revenue allowance on profit, or on top management salaries etc.

We are aware of public commentary by ActewAGL dramatically claiming that if the draft determination is applied, there will be substantial job losses for the ACT. For example:

"ActewAGL says Canberra's electricity supply will be at risk, the utility's staff numbers will be "slashed and burned" and executives pay reduced by 40 per cent because of the regulator's draft revenue reduction, back dated to July this year" and "ActewAGL would have to cut about one-third of its 600 staff immediately, on top of the 90 staff gone in the past year, . . . it's not doable without the certainty that our reliability will completely collapse over five years and customer service will dramatically fall, and it must increase."

We recognise this concern, but also observe the data shown in figure 5 demonstrates that the ACT has the highest rate of small business electricity debt in the NEM. Standard economic analysis would say that high input costs, eg electricity, are stifling small business growth and associated jobs growth. Lower electricity prices, of the magnitude given by the

February 2015

<sup>&</sup>lt;sup>4</sup> Canberra Times, 27<sup>th</sup> November 2014; <a href="http://www.canberratimes.com.au/act-news/actewagl-says-power-supply-in-canberra-at-risk-20141127-11uyv7.html">http://www.canberratimes.com.au/act-news/actewagl-says-power-supply-in-canberra-at-risk-20141127-11uyv7.html</a> and Canberra Times, 22 January 2014, http://www.canberratimes.com.au/act-news/actewagl-says-public-safety-at-risk-due-to-reckless-regulator-cuts-20150122-12vkh4.html

draft determination would likely act as a stimulus to ACT economic growth with associated jobs growth.

We consider that the amounts of revenue set by the AER will provide more than sufficient for ActewAGL to meet all its requirements

#### 1.9 Consumer engagement work by ActewAGL

We have considered whether the work conducted by and for ActewAGL has provided meaningful information to consumers about the choices faced in the next period. We note that a crucial part of such an assessment depends upon views about the questions put to consumers. We do not doubt that the questions asked have produced the results reported by ActewAGL, but we do have concerns about whether the questions asked are meaningful in terms of the costs and benefits that customers would, in reality, face. For example, offering customers 'x power cuts for Y bills versus, p power cuts for z bills' suggests that customers will face a certainty of the power cuts postulated for the bills stated. In fact the nature of electric networks is that the choices faced by customers are relative risks and the actual reality may differ. Furthermore, the choice also presupposes that the only option available to the network is to spend more or less on the investment that may affect the risk of power cuts. In reality ActewAGL has many choices as to how it spends its money and so may be able to spend more to reduce the risk of power cuts by spending less on other items. In addition, the business may find that through greater efficiencies or different ways of working that it can deliver a reduction in the risk of power cuts at no additional costs. The sub panel observed in our response to the original proposal that this consultation for 2014-19 did not involve residential consumers and very limited small business engagement, the two largest groups of end consumers. So again, there is very limited consumer engagement basis here to support a claim by ActewAGL for an increase of \$118, per year for average residential consumers, and more for average small business consumers.

# 2 Taking account of consumer views

In this section, which deals with a core role of the CCP, we have decided to respond to some comments made by ActewAGL, to us, in their letter of 12<sup>th</sup> September.

#### 2.1 Consumer engagement - ActewAGL

The whole CCP has focused on consumer engagement as a priority concern since its inception. In its first piece of advice to the AER, the CCP explained that it would consider that Network Service Providers' (NSPs') engagement with consumers would be most meaningful if NSPs could demonstrate that they had communicated with their consumers about how their choices would affect the prices they paid.<sup>5</sup>

On the same issue, in August 2014, this sub panel (CCP1) wrote in its submission regarding the NSW and ACT distribution businesses' regulatory proposals that:

"The sub-panel remains concerned that consumers are not being clearly provided with the cost and price implications of the preferences that they express and recommends that the AER consider this issue when assessing the effectiveness of the network businesses' consumer engagement activities."

The sub panel's assessment of what ActewAGL has done in its engagement with its consumers is to fail to have adequate regard to the above consideration. As a consequence, the sub panel recommends to the AER that the feedback generated from ActewAGL consumer engagement activities needs to be carefully evaluated alongside evidence about their consumers and stakeholders that is generated from other sources, including household consumers who are in hardship, relying on concession to pay their electricity bills, generating energy debt and being disconnected as well as small businesses with significant energy debt.

Further to the above recommendation, the sub panel remains concerned that ActewAGL has not supplied adequate information to the consumers that it has consulted, over the three consumer engagement studies undertaken in 2003, 2009 and 2012. Consistent with the sub panel's advice in response to the initial regulatory proposal, we remain of the view that ActewAGL has not providing consumers with sufficient and relevant information as part of their consumer engagement activities. We believe that information should be provided as part of consumer engagement activities in areas including average prices, total revenue, total profits, and quality and reliability of supply and recommend that the AER consider this issue when assessing ActewAGL's consumer engagement activities.

The International Association of Public Participation (IAP2) is well regarded for its frameworks and approaches to consumer and community engagement. We discussed their spectrum of engagement in our submission in response to the initial proposal. Based on the IAP2 Spectrum, the sub panel notes that ActewAGL's consumer engagement has tended to be at the "Inform" level of participation and to a more limited extent the "Involve" level. As

February 2015

<sup>&</sup>lt;sup>5</sup> Consumer Challenge Panel (2013) Effective Consumer Engagement at <a href="http://www.aer.gov.au/sites/default/files/CCP%20advice%20to%20the%20AER%20regarding%20consumer%20engagement%20%E2%80%93%2028%20November%202013.pdf">http://www.aer.gov.au/sites/default/files/CCP%20advice%20to%20the%20AER%20regarding%20consumer%20engagement%20%E2%80%93%2028%20November%202013.pdf</a>

<sup>&</sup>lt;sup>6</sup> Consumer Challenge Panel Sub Panel 1 (2014) Jam Tomorrow? p. 7

was noted in our earlier submission, the sub panel would expect to see more effort by the business to engage consumers at the "Involve" and "collaborate" levels. There should also be some planning to reach the 'empower' end of the IAP2 spectrum, over time. In their letter to the CCP, 12<sup>th</sup> September 2014, ActewAGL write

"ActewAGL Distribution is also very concerned with some of the CCP's related comments that appear to question the validity of the results obtained from the surveys undertaken in 2003, 2009 and 2012. Despite the quality of these studies, the CCP advise that there is a "lack of adequate evidence" to support ActewAGL Distribution's statements on the views of its customers on the price and service reliability and price/quality trade-off."

The sub panel is not "questioning validity of the results obtained" in the three surveys, we are questioning the interpretation and application of these results, and particularly their use as part of the argument presented to seek significant increases in revenue for 2015-19, increases that would have resulted in a \$118 annual increase on the average residential bill in 2015-16, (AER estimate).

The following discussion returns to the three studies cited by ActewAGL, with some brief commentary about the limits in application for each of them

In the initial proposal, ActewAGL says:

"The first study was undertaken for ActewAGL Distribution and ACTEW Corporation by NERA Economic Consulting (NERA) and ACNielsen in 2003.26 The study measured the WTP and attitudes of both residential and non-residential customers across a range of attributes of water, gas and electricity network services in the ACT, with the focus of the electricity component of the study on the quality and reliability of supply...

More than 480 customers participated in the electricity component of the 12-month project, which included focus groups, face-to-face questioning, and computer-aided telephone interviews. Separate focus groups were held for small and large business organisations, government organisations, and residential (including concession card holder) consumers. ... The findings showed that, as far as customers were concerned, ActewAGL did not wastefully over-engineer (or 'gold plate') its infrastructure and that customers did not want lower service levels at corresponding lower prices. The study found that customers were less concerned with planned (than unplanned) outages of a given duration, as long as they were given sufficient notice ... The research found that 37 per cent of respondents in areas with overhead wires indicated that keeping trees clear of powerlines was a problem for them. This finding prompted ActewAGL Distribution to consider options for addressing this concern, including replacing existing"

The sub panel first notes that this first study was an important, early study on consumer attitudes, but there have been considerable change in electricity prices and energy markets, since the study was undertaken, 12 years ago, when average household electricity bills were about 70% lower than they are now.

This study makes some useful findings about planned vs unplanned outages and satisfaction with current reliability levels. It also reports that keeping trees clear of overhead powerlines was an issue for 37% of residential respondents – not an overwhelming majority of surveyed customers.

There is value in these findings, but they do not provide a strong case for an increase of \$118 per year in electricity bills.

ActewAGL also said in their original submission,

"The second study in 2009 ... was undertaken by the Australian National University (ANU) and University of Sydney and focused on estimating residential customers' WTP for undergrounding in established urban areas. The study was overseen by two of Australia's leading exponents of the choice modelling valuation technique—
Professor Jeff Bennett and Professor David Hensher. A survey of 1755 residential customers, including 11 in-depth, face-to-face interviews, found large variation in WTP, with the highest economic benefits likely to be achieved by undergrounding in areas with higher household income and older residents ..."

This second study is focused on the question of undergrounding cables and the willingness of consumers to pay for this. The study deals with a very specific question and cannot be expanded to more general conclusions about any issue other than the study focus. The results of which cannot be extrapolated to say that consumers want to pay an extra \$118 per year for their electricity.

This 2009 study also "found large variation in WTP" across consumers. We are not aware of ActewAGL considering this variation in consumer sentiment in either their original or revised proposal.

The original 2015-19 ActewAGL proposal also discussed the 2012 study, saying

"The most recent study in 2011/12 was an independent research project undertaken by researchers at the ANU (with peer review by Professor Riccardo Scarpa) into the preferences of Canberra households for water, gas and electricity network services, including electricity supply reliability. Some 414 residential customers participated in the electricity component of the study—six in-depth, face-to-face interviews, and 408 in an online choice modelling survey. The findings were generally consistent with those of the 2003 study, with the vast majority of customers expressing the view that ActewAGL Distribution networks are well maintained and that ActewAGL Distribution is responsive in the event of a supply problem. The average value placed on avoiding supply interruptions had not changed markedly in real terms since the 2003 study. The study confirmed that residential customers dislike all types of supply interruptions, but that the nature of the interruption matters. WTP to avoid additional interruptions increases with interruption duration and WTP to avoid unplanned interruptions is around twice the level of WTP to avoid planned interruptions."

The conclusions from this third study are that ActewAGL customers, on average, regard the network as being well maintained and preferring planned over unplanned interruptions to supply. Again, the sub panel accepts that there is usefulness in these findings, but they do not provide the basis for deducing that a \$118 per year price increase is acceptable to consumers.

With regard to the 2014-19 regulatory proposal, ActewAGL wrote

"ActewAGL Distribution has undertaken initial consultation with stakeholders during the determination process and will continue to engage throughout the determination process. Initial consultation has included meetings with the following key stakeholders on key elements of this proposal such as the connection policy:

- ACT Independent Competition and Regulatory Commission
- ACT Government Environment and Sustainable Development Directorate
- Master Builders' Association
- Housing Industry Association
- Property Council of Australia
- Land Development Agency

Engagement with consumers more broadly will involve a public information session following submission of this proposal, as well as an update of ActewAGL Distribution's website to include additional information on consultation opportunities, the transitional arrangements, the connection policy and manual as well as fact sheets containing a range of useful information for consumers."

The sub panel observed in our response to the original proposal that this consultation for 2014-19 did not involve residential consumers and very limited small business engagement, the two largest groups of end consumers. So again, there is very limited consumer engagement basis here to support a claim by ActewAGL for an increase of \$118, per year for average residential consumers, and more for average small business consumers. The sub panel recognises that since the original proposal was lodged, a meeting of an Energy Consumer Reference Council has been conducted, and other communication steps are being implemented. We however are not aware of any revised consumer input that has been used to inform the revised proposal.

# 2.2 Reliability and Willingness To Pay (WTP)

ActewAGL also challenges the CCP sub panel's submission responding to the initial proposal, where we said "WTP information in and of itself is insufficient to support activities of network businesses." This section considered the use and application of willingness to pay (WTP) surveys.

The sub panel notes the use of WTP survey research by ActewAGL between 2003 and 2012. The sub panel recommends that the AER evaluate the WTP research undertaken by ActewAGL in relation to reliability, safety and the testing of their regulatory proposal and any interpretation of the consequences of the AER draft decision. We suggest that the AER

may wish to discuss WTP with the Australian Energy Market Operator (AEMO) if it has not done so already, given AEMO's recent high quality VCR (value of customer reliability) work. In the context of reliability, the sub panel notes that the AER has stated that it addresses the detail of the CCP's submission "in conducted [sic] our detailed analysis (see attachments)". The sub panel has reviewed the AER's comments on reliability in the draft decision and its attachments and has not located any references to the CCP advice on reliability. As per the terms of the Consumer Challenge Panel Framework for Advice, the sub panel accepts that while "the AER will actively listen and engage in open debate and discussion with sub panel members throughout the sub panels' advice to the AER", the AER "is not obliged to accept any or all of it."

The sub panel wrote in the CCP submission that:

"Anecdotal evidence and the views of some consumer organisations suggests to the sub-panel that consumers may prefer lower prices even if that meant a greater risk of reduced reliability, particularly where any such risk is small. These alternative choices are what the sub panel would wish to see the DNSPs test out with a range of consumers. In the absence of such research we consider that the AER will need to take into account other evidence of the views of consumers in reaching its determinations in respect of customer willingness to pay for specific levels of reliability." <sup>10</sup>

In this context, the sub panel wishes to draw attention to, for example, the Australian Energy Market Commission's (AEMC) Review of distribution reliability outcomes and standards - NSW Workstream (2012). This work included a survey of 1,300 electricity consumers in NSW. While the sub panel has no reason to believe that higher reliability cannot be achieved with much less expenditure than ActewAGL has proposed, we are interested in the proposition explored in one part of the survey, where the survey asked customers if they were willing to accept an increase in power outages of 60 minutes each year in exchange for a discount on their electricity bill. The following figure, table 2, is reproduced from the Oakley Greenwood report<sup>11</sup> of the NSW customer survey indicates the response:

<sup>&</sup>lt;sup>7</sup> Australian Energy Market Operator (2014) Value of Customer Reliability Review Final Report at <a href="http://www.aemo.com.au/Electricity/Planning/Value-of-Customer-Reliability-review">http://www.aemo.com.au/Electricity/Planning/Value-of-Customer-Reliability-review</a>

<sup>&</sup>lt;sup>8</sup> AER (2014) Draft Decision p. 86

<sup>&</sup>lt;sup>9</sup> AER (no date) Consumer Challenge Panel Framework for Advice p. 5

<sup>&</sup>lt;sup>10</sup> CCP (2014) Jam Tomorrow? CCP Submission p. 11

<sup>&</sup>lt;sup>11</sup> Oakley Greenwood (2012) NSW Value of Customer Reliability at <a href="http://www.aemc.gov.au/getattachment/38cd921f-d40c-4e5d-a1fc-3a9ee3ee4759/Oakley-Greenwood-nbsp;NSW-customer-survey-results.aspx">http://www.aemc.gov.au/getattachment/38cd921f-d40c-4e5d-a1fc-3a9ee3ee4759/Oakley-Greenwood-nbsp;NSW-customer-survey-results.aspx</a> p. 55

Table 2. Customer willingness to accept 60 minute supply interruption.

Table 46: Customers' willingness to accept an additional 60 minutes of supply interruption over the course of a year

Per cent of customers who reported they would be willing to accept an increase of 60 minutes per year of interruptions to their electricity supply if their bill was decreased by:	% of customers (base = 528)	
1%	27.3%	
1.5%	0.9%	
2%	3.8%	
more than 2%	34.1%	
could not quantify or would not accept	33.9%	

Source: Willingness to accept and supply interruptions. Source: Oakley Greenwood (2012) NSW Value of Customer Reliability

The sub panel notes the significant percentage of customers who reported they would be willing to accept the specified interruptions in their electricity supply. The sub panel also notes that the AEMC suggested that: "there may be large benefits in slightly reducing the level of reliability provided to customers."12 The sub panel wishes to draw the AER's attention to this work on reliability with the caveat that we have no reason to believe that higher reliability cannot be achieved with much less expenditure than ActewAGL has proposed.

The sub panel notes the usefulness of well-designed choice modelling and notes that in the CCP advice to the AER on consumer engagement, we commented, "the Panel believes that choice modelling is the preferred technique for estimating the WTP of consumers." 13 We also noted that "the results of any individual study undertaken by network businesses will also be affected by the choice set design, sampling approach, and sample size, among other things."14 The sub panel reiterated these comments from the CCP in its submission on the initial proposal.

Consumer engagement approaches need to be understood for the strengths of the wide range of approaches that consumer engagement offers, as well as the limits to what can sensibly be inferred from them. We make the following summary observations about the nature of consumer engagement:

1. Consumers are not homogeneous, there will rarely be a clear, universally agreed conclusion on subjective questions, from a diversity of consumers.

<sup>12</sup> AEMC (2012) Fact sheet: NSW customer survey on electricity reliability at  $\underline{http://www.aemc.gov.au/getattachment/d8c16b7f-776c-4414-a22d-619219c89528/Fact-sheet-NSW-customer-like the action of the property of the p$ survey.aspx

13 Consumer Challenge Panel (2014) Preliminary Advice on the Effectiveness of Consumer Engagement by Network Businesses p. 7

<sup>&</sup>lt;sup>14</sup> Consumer Challenge Panel (2014) op cit p. 7

- 2. There are many ways to engage with consumers, many of these approaches come from different disciplines, including community development as well as more marketing related approaches. The 'market research' methodology used by ActewAGL and other energy network businesses is not an approach of 'engagement' with consumers. Engagement is a two way, interactive process, market research approaches are generally 'one way' and with minimal actual engagement.
- 3. There is extensive expertise in consumer engagement, within communities and particularly community based organisations, these organisations need to be engaged as much as consulting firms who focus on market research.
- 4. Consumer engagement is dynamic, whereas much current energy market related consumer surveying (rather than engagement) takes a much more static approach.

#### 3 Standard Control

#### 3.1 CAPEX

The sub panel does not consider that either the original or revised proposals from ActewAGL have adequately canvassed lower cost alternatives to capex proposals; there is inadequate consideration of demand management alternatives, for example.

We also opine that the Repex proposal, in particular, within the capex proposal is "overstated."

The sub panel supports the AER's draft determination regarding capex, the AER has this revision 'about right.'

# 3.2 Step Changes

ActewAGL needs to move to more efficient operations as per the AER benchmarking report. We note from the benchmarking report that the AER proposes a "30% allowance for operating environment differences" and benchmarked against 75%+ efficient firms. These allowances are very generous to the business.

The step changes proposed by ActewAGL are discretionary business decisions, and so cannot be regarded as "Step Changes." Consequently we support the AER draft determination to not approve "step changes."

#### 4 Alternate Control Services

#### 4.1 Public Lighting

While we raised the issue of public lighting in considering NSW draft determinations. This matter does not apply to ActewAGL, who have no responsibilities for public lighting.

#### 4.2 Metering

We support the AER's draft determination position of setting a price cap for charges on both type 5 and type 6 meters, with the rider that such price caps should be set on the economic value of a meter.

Note that for NSW determinations, the sub panel supported the AER decision not to allow exit fees. While exit fees are not a part of the ActewAGL proposal, we wish to be clear that we would not expect any future consideration of exit fees applying to metering in the future. We say this cognisant of current considerations by the AEMC of a rule change that would expand competition for metering and related services.

#### 4.3 Ancillary network services

The sub panel also supports the AER's approach to ancillary network services which is to set a schedule of fees for the first year, which would be adjusted by (CPI - X) for subsequent years.

# 5 Responses to AER draft determination – changes needed for Final Determination:

## 5.1 Does the AER's decision jeopardise safety or reliability?

ActewAGL has argued that the AER's decisions will jeopardise safety and reliability. Are these arguments valid? We have undertaken various analyses to test their arguments, and present this in this sub-section, in four parts.

Firstly, as we observed in our presentation at the Pre-determination Conference on 9 December 2014 the amount that the AER has allowed for opex for ActewAGL is roughly comparable to the amounts that they had spent, or had been allowed to charge users in all but the last regulatory control period. The picture for capex is similar, the AER's decision is merely returning this business to expenditure allowances consistent with previous periods. This is an approach that we have argued earlier in this submission with regard to the 'outlier' nature of the 2009-14 regulatory period.

Secondly, we have observed that the Chief Executive of Actew-AGL, Michael Costello has been quoted frequently in print media, for example described the benchmarking as "highly questionable". For example, Mr Costello is quoted in the Sydney Morning Herald<sup>15</sup> on 28<sup>th</sup> November 2014 as saying; "The AER has primarily based its draft decision to cut operating costs on highly questionable statistical analysis," he said, arguing the use of the data to be "reckless and simply not fit" for the way it has been used.

Third, we considered whether the AER's draft decision jeopardises the ability of the businesses to fund their operation. We agree with Professor Newbery in his expert witness report commissioned by the lawyers acting for Networks New South Wales, that the AER should consider this.

We have undertaken an analysis of this which is presented in Table 3 below. It shows:

The allowed revenue (based on the AER's Draft Decision)

- less the allowed opex,
- less our calculation of the interest expense needed to fund the regulated asset base based on the start of the regulatory control period and
- less our calculation of the interest expense associated with funding the capex allowed by the AER in its Draft Decision<sup>16</sup>.

The bottom line from this calculation is pre-tax cash flow.

http://www.smh.com.au/business/jobs-axed-asset-prices-slashed-on-nsw-power-price-cut-20141127-11vayl.html#ixzz3RUqrsC1y

<sup>&</sup>lt;sup>16</sup> We have made generous assumptions in favour of the distributors – that interest rates will be as high for the next five years as they have been in the 2013/14 financial year, and that 80% of the new capital expenditure in the regulatory control period will be funded through debt. The AER assumes far less aggressive assumptions in its determination of the regulated returns.

As Table 3 shows that the business can expected to deliver very healthy pre-tax cash flows. There are of course many ways to make these calculation more sophisticated, but based on this analysis – making assumptions highly favourable to the distributors – there can be no reasonable doubt that the AER's decision means that the distributors will be able to easily fund their operations.

Table 3. Cash flow analysis for the period 2015-19 based on AER Draft Decision.

	ActewAGL
Revenue (\$m)	\$576
Less opex	\$223
Less interest to fund opening RAB	\$212
Less interest to fund new capex	<u>\$31</u>
Equals pre-tax cash flow	\$110

The bottom row of this table provides a measure of the post tax return on equity for ActewAGL Distribution. The figures for 2013/14 are in table 4.

Fourth, we considered the profitability of ActewAGL distribution, results are in table 4. This table is based on the information in the published by the ACT Government Treasury, in budget papers.

Table 4 ActewAGL profitability

2012-13 outcome	2013-14 budget	2014-15 estimate	2015-16 estimate	2016-17 estimate
\$88.14m	\$99.40m	\$107.07m	\$111.05m	\$118.68m

Source: ACT Treasury budget papers, 2013-14, re Actew

The operating profit for the ActewAGL entity is double the Actew budget expectation, since ActewAGL is owned 50% by each of the ACT government (Actew) and AGL.

Tables 3 and 4 present clear support for our observation that ActewAGL is a very profitable business, able to meet safety and reliability responsibilities.

However, the AER's determination of the return on equity is based on an equity risk premium that is established with respect to a market in which accounting values of tangible assets are generally based on historic costs and where, if ever, upward revaluations above cost are reflected in statements of comprehensive income and so will be reflected in the market equity risk premium<sup>17</sup>.

<sup>&</sup>lt;sup>17</sup> International Accounting Standard 16 allows both a cost model and revaluation model for the valuation of property, plant and equipment. But if the revaluation model is employed (which is seldom the case anyway), upward revaluations above historic cost must be taken to comprehensive income.

We are doubtful that the profitability of ActewAGL will decline significantly in the coming regulatory period, based on the AER's Draft Decision. In particular, the margin on the Weighted Average Cost of Capital in the AER's Draft Decision is only very slightly lower than the margin for the regulatory period to which this profitability analysis relates.

For these reasons we conclude that ActewAGL's claim that the AER's Draft Decision will jeopardise safety and reliability is predicated on the assumption that ActewAGL must continue to deliver the unnecessarily high profits that it has delivered over the last regulatory control period. We do not agree that such high profits need to continue to enable the business to finance its activities, and they are not in the interests of consumers

#### 5.2 Is the allowance for debt funding reasonable?

The AER has almost complete discretion under the Rules, to determine borrowing costs that distributors can charge users. This cost accounts for the bulk (60%) of the WACC and, when applied to the RAB, is by far the single biggest element of the "building block" allowed revenues. The AER does not contest that the debt costs that it had previously set for the NSW and ACT distributors is far higher than their actual costs, but has blamed restrictions in the Rules for this. The revised rules remove the restrictions that the AER asked to be removed. However, we suggest that the AER, based on its Draft Decision for the NSW and ACT distributors, is still failing to set debt costs that are in the long term interest of consumers, figure 11 shows that the 2015 AER draft determination for the Debt margin, is still very high by historical comparison and higher than other current DNSP network proposals.

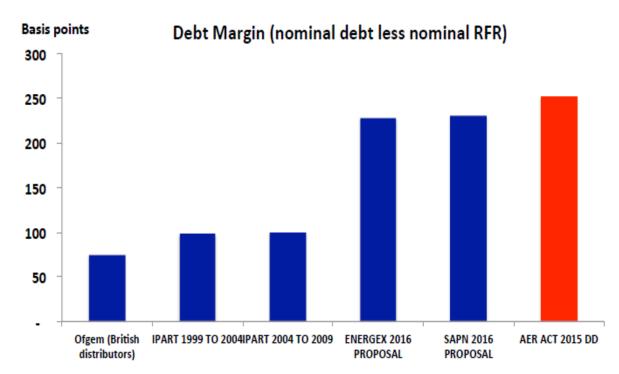


Fig 11 Debt margins

Source: Compiled for CCP by Carbon and Energy Markets. Data from regulatory decision documents

We have two concerns in this regards:

Firstly the AER has claimed that it will use BBB+ ratings for the debt benchmark. However the dataset of BBB+ bonds in Australia is limited, in practice a broad BBB rating is used (thereby including debt that is more expensive). In other words the AER has not implemented the approach it has claimed, and this results in a more generous benchmark and hence higher debt costs to be borne by end consumers.

Second, the evidence from the actual yields on network bonds and the price paid for bank debt shows that network businesses' actual borrowing costs are much lower than implied by their credit ratings. This is because lenders recognise that networks are monopolies and hence that even though credit rating agencies may, for example, assess the credit rating of a network business to be, say, BBB, its status as a monopoly means that actual credit risks are lower, and hence lenders are willing to lend money to network utilities at much lower rates than implied by their credit ratings. Evidence for this was set out in the Energy Users Rule Change Committee's submission to the AEMC in 2011, on actual network borrowing costs during the peak of the Global Financial Crisis. We also refer the Committee to the advice provided to the AER by its consultant, Associate Professor Lally and Chairmont Consulting  $^{18}$ both of whom make the same point that we make in relation to the use of credit ratings to assess the debt costs of network monopolies. In addition, while we are not at liberty to divulge material provided to us in confidence, we can say that major investment banks and equity analysts have conclude, on the basis of their own proprietary analysis, exactly this point, suggesting a long run average cost of debt of around 5%, substantially below the level sought by Energex, Ergon and SAPN and even further below the rate that the AER has decided for the NSW and ACT distributors. The AER has said that it will have regard to analyst reports and so should be able to acquire this information for itself. In addition, the AER has had many years to collect actual debt data to investigate differences between its BBB benchmark and actual costs. Such data is obtainable – but so far the AER has not collected these data. We encourage the AER to obtain these data and ensure that its allowance for debt costs reflects actual costs rather than what the AER's own consultants suggest is an inappropriately specified index. For the avoidance of doubt, establishing an allowance for debt costs based on actual debt costs does not undermine incentives to reduce debt costs, just as establishing an opex allowance based on a benchmark of actual operating costs does not undermine incentives for opex reductions.

# 5.3 Is the cost of equity adequate?

ActewAGL is seeking a return on equity that greatly exceeds that determined as reasonable by the AER in its draft decision, using its Guidelines.

The AER's decision to allow a nominal post tax return on equity of 8.1% for ActewAGL DNSPs, is 261 basis points lower than the ActewAGL proposals of May 2014. The February 2015 revised proposal is still well over 200 basis points above the AER's draft decision. The difference is due to a lower equity beta assumption by the AER – 0.70 as opposed to the DNSPs' non specified beta due to 'multiple model approach – and a lower risk free rate of

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<sup>&</sup>lt;sup>18</sup> Chairmont Consulting 2012. DEBT RISK PREMIUM EXPERT REPORT

3.55% as opposed to the DNSPs' proposed 4.12%. The AER set a market risk premium of 6.5, ActewAGL did not specify an MRP due to its preference for a multiple model approach"

The sub panel has previously advised the AER of its concerns that the Australian distribution businesses earn excessive profits, not in some small part from the return on equity that is allowed by the AER.<sup>19</sup>

The AER has applied its Guideline on Rate of Return. The ActewAGL has digressed significantly from the AER's Guideline. We also note that the process for establishing the guidelines was rigorous and inclusive. As part of the year-long 2013 Better Regulation program conducted by the AER, network representatives, consumer groups and other stakeholders spent considerable time discussing and debating to produce the Better Regulation Guidelines, including the rate of return guideline.

We maintain the view that even within the Guidelines, the AER could still set a lower return on equity by specifying a market risk premium of 6.0 or below and an equity beta closer to 0.4 than 0.7. Point estimates for these parameters that are low down in the AER's range would be more in the long term interests of consumers while still meeting investors' rights to an adequate return on capital invested. The sub panel urges the AER to use the discretion it is given under the National Electricity Law, to set a rate of return, including cost of equity, which is in the interests of consumers as well as best meeting the rate of return objective. Our view is that lower rates of return would adequately recompense shareholders, who have enjoyed what we consider to be undue levels of profitability over recent regulatory periods, which has unacceptably impacted on prices paid by consumers. The sub panel is of the opinion that the cost of equity allowance could be lower than proposed in the draft determination since lower market risk premium and equity beta figures could be applied, in the best interests of consumers.

# 5.4 Rate of return

The Weighted average cost of capital (WACC) proposed in the draft determination is still higher than it would have been if the period up to 2009 was used as the base, which we argued earlier, is an appropriate base. Figure 12 also shows that the draft determination WACC is significantly higher than the Ofgem WACC for the UK, which is relevant since all large utility businesses borrow on global capital markets. We recognize that the WACC is calculated from a number of parameters, some, of which we have considered separately, but we also think it important to consider the overall WACC, as a significant regulatory element.

http://www.aer.gov.au/sites/default/files/CCP%20Rate%20of%20Return%20submission.pdf

February 2015

<sup>&</sup>lt;sup>19</sup> Smelling the roses and escaping the rabbit holes: the value of looking at actual outcomes in deciding WACC. Prepared for the Board of the Australian Energy Regulator. Consumer Challenge Panel available at:

WACC Vanilla Nominal

8.00%

7.50%

6.50%

6.00%

5.50%

4.50%

distributors)

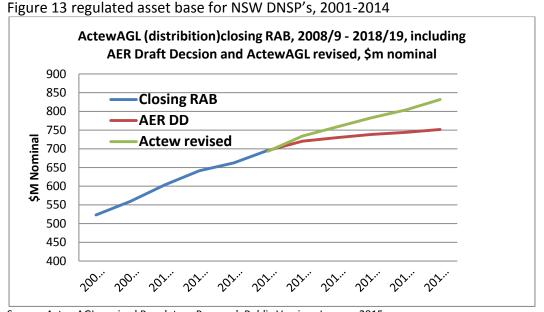
WACC Vanilla Nominal

AER 2015 DD

Figure 12. WACC comparisons

Source: Compiled for CCP by Carbon and Energy Markets. Data from regulatory decision documents

The Regulated Asset Base (RAB) is the regulatory parameter that arguably has more impact on the long term interests of consumers than any other parameter. Once a business asset is added to the RAB, consumers can keep paying for it over many regulatory periods. It is unambiguously in the long term interest of consumers to prevent the RAB from growing from reset to reset. Yet figure 13 shows that ActewAGL wishes to maintain the growth in RAB over the coming regulatory period, despite some years of declining demand. The proposed RAB increase, over the decade from 2008/9 is 59% for the revised ActewAGL proposal and 43% over the same period for the AER draft determination. ActewAGL (distribution) has significantly increased their RAB over the 2009-14 regulatory period and seek to effectively 'lock in' that increase over the coming 5 year regulatory period, maintaining the record high RAB levels. This is unacceptable for consumers.



Source: ActewAGL, revised Regulatory Proposal, Public Version, January 2015.

Following the draft determination, the Regulated Asset Base does not decline in real terms, as we argue, it should.

The sub panel is of the opinion that the cost of equity allowance could be lower than proposed in the draft determination since lower market risk premium and equity beta figures could be applied, in the best interests of consumers.

# 5.5 Is the allowance for tax reasonable?

The AER's only role with regard to tax is to allow for tax payments, within the total revenue allowance and to deal with gamma, which is about dividend imputation. Tax allowances and gamma must be set with regard to the NEO, and specifically the long term interest of consumers.

With respect to income taxes, the AER calculates the tax based on a "benchmark efficient entity" as specified in 6.5.3 of the Rules. Like the allowances for debt costs, equity costs, debt and equity raising costs this model fails to take account of the actual situation, instead it relies on a model of the actual situation.

There seems to be substantial evidence that there is a big difference between the AER's assessment of income tax, and the actual situation. All of this difference accrues to shareholders.

Tax is complex, but on the basis of the available evidence there seems to be a big difference between the AER's expectation of income tax and the actual situation, and specifically that the allowed tax seems to be far higher than the actual tax. If this perception is correct, the AER should take account of it. As far as we can see there is no constraint in the Rules preventing the AER from taking account of the actual tax situation in its estimate of the tax allowance to be charged to electricity consumers in the determination of allowed revenues. We appreciate that it would be a significant undertaking to do this, but since the tax allowances are very significant, effort spent on this is, we suggest, essential in the calculation of tax allowances that are in the interest of consumers.

Regarding gamma, it is difficult for the CCP to support a gamma of 0.5 as being better or worse than 1 or 0 or any number in between, we simply do not know enough about the vagaries of such calculations. Though the lack of tax paid would suggest a gamma nearer 1 than 0. This said, we can see no reason for a departure from the original gamma of 0.5 that the AER was proposing, we have not seen any argument convincing us of the merits of departing from the 0.5 figure.

# 5.6 Is the AER's benchmarking of opex reasonable?

The Productivity Commission released a major report on Energy Network regulation in June 2013.<sup>20</sup> They devoted a chapter to the use of benchmarking, commencing the chapter with the following:

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<sup>&</sup>lt;sup>20</sup> Productivity Commission Electricity Network Regulation - Inquiry report, 26 June 2013.

"A major international survey ranked Australia as a relatively unsophisticated user of benchmarking in electricity networks" (Haney and Pollitt 2011). End users have also criticised the limited use of benchmarking in the current regulatory regime:

"Our view is that benchmarking has generally had an insignificant role in the AER's determination of expenditure allowances. We have observed that in most of its determinations there is no evidence that the AER has benchmarked capitalised expenditure allowances at all. The benchmarking that it has done of operating expenditures has not, in our opinion, been adequate. Even where there is some evidence of benchmarking by the AER, there is no evidence of how this information affected its view of the appropriate expenditure allowances. (EUAA, sub. 24, p. 4) The AER has not used benchmarking effectively and yes it should adopt different practices. The reasons for this probably lie with the regulatory approach (propose/respond) the AER must implement. (MEU, sub. 11, p. 30)"

#### The Productivity Commission also observed:

"Rule changes introduced in late 2012 require the AER to undertake routine benchmarking and give it the discretion, though not the obligation, to use benchmarking in making price and revenue determinations."

#### And concluded with

"Although Australia has been relatively 'unsophisticated' in its use and application of regulatory benchmarking in the electricity sector, this is likely to change in coming years with improvement in the AER's data collection and modelling capabilities. An increase in benchmarking for diagnostic and informational purposes is likely in the near term, given recent AEMC Rule changes. Over time, repeated use of benchmarking models (as well as ex-post analysis) will improve the reliability of the models' estimation of network efficiencies, and increase the potential for them to have greater weight in regulatory decisions. Whilst there may be some shorter-term burdens for network businesses in providing additional data to the AER, improved confidence in benchmarking has the potential to simplify determinations and lower overall costs, leading to benefits for network businesses and consumers."

This commentary reinforces the importance of benchmarking in electricity sector regulation and observes that the AER has been relatively 'unsophisticated' in the past, by global regulatory standards.

We recognise the legitimacy of the use of benchmarking by regulators and applaud the AER for its efforts, since the Productivity Commission's (draft) report. Over the last 2 years, the AER has made significant progress in developing the 'sophistication' of benchmarking effort.

We are aware of three areas of development of benchmarking:

The 2013 Better Regulation" program had a major 'stream' of work dealing with benchmarking with a substantial number of meetings involving network businesses, academics and consultants and consumer representatives to consider both benchmarking

modelling approaches and 'category analysis', detailed consideration of specific aspects of categories to be benchmarked.

The AER has also engaged academics / consultants with specific expertise in benchmarking and utilised their advice.

The AER has obtained data from network businesses, in a standardised form, during 2014 through RIN's. This network business supplied data has been the basis of the benchmarking report that has been utilised in assessing the NSW (and ACT) 2014-19 regulatory proposals. It would by churlish of DNSP's to criticise the data used in benchmarking, since they have supplied the data.

We observe that "the perfect is the enemy of the good" <sup>21</sup> and so it is with application of benchmarking. No methodology is perfect (and experts differ as to their favoured methodology), but the 2014 benchmarking released by the AER is certainly 'good' in that it is robust enough to be applied for regulatory purpose, as the Productivity Commission proposed.

We would also like to record our fulsome satisfaction with the consultation that the AER has undertaken in developing and implementing its use of benchmarks in the Draft Decision.

#### 5.6.1 Econometric modeling of opex

The results of the benchmarking work undertaken by the AER, are given in figure 14 below, which is taken from the AER draft determination document. The figure shows results for each electricity distribution network business in Australia, and gives results for 4 different econometric models. Each model provides a 'score' between 0 and 1, for each firm, with 1 being efficient, that is on the efficiency frontier, the lower the 'score', the lower the level of business efficiency.

Of major concern is that ActewAGL has the lowest score, of all Australian DNSP's, for three of the four models used: Cobb Douglas stochastic frontier analysis, Cobb Douglas least squares estimate regression and translog least squares estimate regression. For the remaining model, opex multilateral partial factor productivity, ActewAGL is one of the three poorest performing DNSP's in Australia. These results are significant and give very strong indication that ActewAGL is not operating at efficient levels. It is therefore beholden on the regulator, acting in the best interest of consumers and as proxy for market pressures, to push ActewAGL to operate more efficiently and less like a monopoly.

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<sup>&</sup>lt;sup>21</sup> A quote widely attributed to Voltaire.

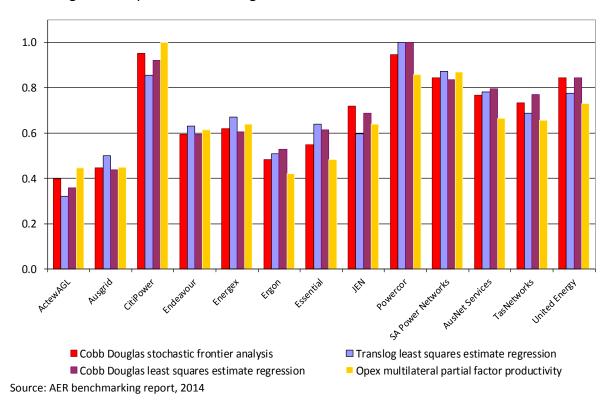


Figure 14. Opex Benchmarking results

We have reviewed the AER's opex benchmarking approaches and have had the opportunity to ask staff and advisors about it. While we disagree with some of the assumptions in the capex productivity analysis (which is not a core part of the AER's benchmarking) we support the opex analysis that has been undertaken. Our assessment is that the work is thorough, and that care has been taken in choosing appropriate models, testing them and defining their limitations including the standard errors of their estimates. We find the consistency of its partial slope coefficients (across models) and the narrowness of its standard errors reassuring. The explanatory factors that the model has chosen are consistent with those we have seen in other modelling exercises (see Table 3 below) and the ordinary least squares

We do however share the concerns raised by Professor Newbery in respect of possibly inconsistent definition of opex (amongst the Australian firms), the use of the Canadian data and the post-model adjustments. However it seems quite clear to us that each of these issues will have resulted in a *more* rather than less generous assessment of the relative inefficiency of the NSW distributors. Specifically:

and least square dummy variable approaches are well accepted.

The government owned distributors have much greater incentive to capitalise expenditure since the gap between their cost of capital and allowed returns is much wider than for the privately owned distributors, having regard to their access to inexpensive Treasury debt, the debt guarantee fee and income tax benefits that the businesses deliver to their Governments.

The Canadian distributors included in Economic Insights' model typically retail and distribute electricity. Adjusting the Canadian data for the exclusion of retail expenditure is likely to result in more adverse efficiency estimates for the New South Wales distributors. The post-model adjustments undertaken by Economic Insights and the AER have all been to the advantage of the NSW distributors. Had these adjustments not been made – as Professor Newbery rightly suggests – the efficiency adjustment for the NSW distributors would be even tighter.

Professor Newbery has presented his own econometric assessment of the efficiency of the NSW distributors. His analysis contradicts the AER's and also contradicts the public statements of the Networks New South Wales Chief Executive, echoed by ActewAGL, on the inefficiency of the businesses that he manages. Professor Newbery's analysis delivers similar assessment of the efficiency of the Victorian and South Australian distributors as Economic Insights' analysis of the efficiency of these distributors. The gap between the efficiency assessment of the Queensland distributors is not large, but the gap between Professor Newbery's analysis and Economic Insights' is however very large for the New South Wales and ACT distributors. In fact the most efficient distributors according to Professor Newbery's analysis seem to be the two New South Wales distributors, Essential Energy and Endeavour. How can such a big disparity exist between Professor Newbery's analysis and Economic Insights' analysis?

Professor Newbery has used Cobb Douglas and Translog models and his estimators are based on ordinary least square and generalised least square estimators. There is nothing unusual in this. Compared to the stochastic frontier approach used by the Economic Insights, these approaches can be expected to deliver higher, not lower efficiency estimates. Comparing the slope coefficients in Professor Newbery and Economic Insights' analysis however, we see big differences. Whereas Economic Insights' models produced consistent slope coefficients across their models, Professor Newbery's analysis shows a very wide variation in the slope coefficients on the explanatory factors, particularly those that his model seems to suggest have the greatest explanatory power. This variation is not just for slope coefficients determined using one estimator, but also for the difference between the same models using different estimators. Professor Newbery's analysis also does not provide any information on standard errors and does not explain why his models deliver such different results from each other. Likewise he provides no explanation for his preferred model. We make none of these criticisms in relation to the analysis undertaken by Economic Insights.

Professor Newbery's analysis also seems unusual in that he only presents, effectively just one explanatory variable: customer numbers, whereas typically efficiency studies in electricity distribution always include at least two or more of customer numbers, network throughput, peak demand and network length as explanatory factors (and sometimes includes all of them) – see Table 3 below. Professor Newbery's analysis in fact includes,

effectively only customer numbers,<sup>22</sup> whereas his model did not include throughput or peak demand, every other study of electricity distribution efficiency included either peak demand or network throughput (typically both are not included because they are often highly collinear). Professor Newbery provides no justification for the explanatory factors he has chosen, and why his selection of factors differs so greatly from those adopted in other studies.

Table 5. Explanatory factors in various electricity distribution efficiency studies

Study	Sector, Geography	Explanatory variables			
(Jamasb and	Electricity distribution,	The most frequently used inputs are			
Polliitt, 2001)	international survey,	operating costs, number of employees,			
		transformer capacity, and network			
		length. The most widely used outputs			
		are units of energy delivered, number of			
		customers, and size of service area.			
(Carrington et	Gas distribution,	Length of network, network throughput,			
al., 2002)	Australia	number of customers			
(Edvardson	Electricity distribution,	Length of network, network throughput,			
and F.R.,	Denmark, Norway,	number of customers			
<u>2003</u> )	Sweden, Finland, The				
	Netherlands,				
(Kwoka,	Electricity distribution,	Length of network, network throughput,			
<u>2005</u> )	United States	number of customers (Plus various			
		environmental factors)			
(Kinnunen,	Electricity distribution	Length of network (under and overhead),			
2005) Norway, Sweden Finland		network throughput, number of			
		customers			
(Farsi et al.,	Electricity distribution,	Throughput, number of customers, area,			
<u>2006</u> )	Switzerland	prices			
(Nillesen and	Electricity distribution:	Throughput as a single explanatory			
Pollitt, 2011)	New Zealand	factor. Density, quality as environmental			
		factors. This also, was not an efficiency			
		study.			
( <u>Kuosmanen</u>	Electricity distribution,	Throughput, network length, number of			
et al., 2013)	Finland	customers, proportion of underground			
		cables			
( <u>Frontier</u>	Electricity distribution,	Number of customers, peak demand,			
Economics,	Great Britain	density, prices			
<u>2013</u> )					
( <u>Economic</u>	Electricity distribution,	Number of customers, network			
Insights,	Australia	throughput, demand, network length,			
<u>2014</u> )		share of underground cable			
Professor	Electricity distribution	Network length, density, underground			

<sup>&</sup>lt;sup>22</sup> To be precise two factors are presented circuit length and density, which is defined as customer numbers divided by circuit length (except in CD2 and TL3 where it is customer numbers divided by surface area). Since the log of a quotient can be expressed as a difference in the log of the numerator and log of the denominator the two explanatory factors reduce to just customer numbers.

Study	Sector, Geography	Explanatory variables
Newbery		share, 132kV share, SWER share, RAB
		additions.

For these reasons we suggest that Professor Newbery's model is likely to exhibit significant excluded variable bias. This, in addition to the fact that Professor Newbery's relies on Australian data, may explain the significant gap between his results and those of Economic Insights. On this basis we are satisfied that Professor Newbery's analysis does not undermine our confidence in the AER's opex benchmarking analysis.

#### **5.6.2 Vegetation management**

In responding to our initial submission we said "little effort is made by the distribution business to explain this large expenditure," referring to vegetation management. ActewAGL cites "substantive evidence to support its vegetation expenditure." We note that there has been minimal change in total opex in the revised proposal, reduction of less than 2%, the increased vegetation management costs remain, as proposed in the original regulatory proposal.

ActeWAGL Ausgrid AusNet Services CitiPower Endeavour Energy Energex Ergon Energy Essential Energy JE N Powercon SA Power Networks TasNetworks United Energy NEM 0% 20% 40% 60% 80% 100% Proportion of line (circuit ) Overhead Underground

Figure 15. Proportion of line, underground and overhead

Source: AER Category analysis, RINs

ActewAGL has the highest proportion of line underground of all Australian network businesses, as shown in figure 15, about 50% of all network is underground and consequently not requiring vegetation management. We retain the view that the substantial increase sought for vegetation management is not strongly presented against a background of high proportion of network being underground and a sound existing revenue allowance that provides adequate scope for ActewAGL management to effectively undertake vegetation management.

#### 5.6.3 Reliability

ActewAGL says that they have a highly reliable network, for example CEO, Michael Costello is minuted as telling the ActewAGL Distribution Energy Consumer Reference Council that "the ACT enjoys the lowest electricity prices in Australian and the most reliable energy service.<sup>23</sup>" This perspective is presented as a reflection of the efficiency of the business and grounds for rejecting the AER benchmarking data (figure 14) which shows them as being less efficient than some other Australian network businesses.

Table 6, SAIDI and SAIFI

	Ave SAIDI	Ave SAIDI			Ave SAIFI	Ave SAIFI	Panned %
DNSP	Planned	Unplanned	Planned %	Unplanned %	Planned	Unplanned	Planned %
ActewAGL	53.8	36.1	60	40	0.23	0.66	26
Ausgrid	29.1	142.2	17	83	0.08	1.19	6
Endeavour	63.3	141.4	31	69	0.18	1.15	13
Essential	117.9	290.2	29	71	0,61	2.12	22
Energex	28.5	241.1	1	89	0.1	1.42	7
Ergon	113.6	698.7	14	86	0.62	3.39	15
SAPN	43.1	195.4	18	82	0.29	1.65	15
TasNetworks	59.9	304.2	16	84	0.25	2.23	10
Austnet	127.2	242.9	34	66	0.51	2.42	17
Citipower	7.9	56.6	12	88	0.03	0.70	4
Jen	16.1	85.7	16	84	0.06	1.30	4
Powercorp	34.6	193.6	15	85	0.18	1.96	8
United Energy	32.6	124.3	21	79	0.10	1.35	7
Ave	49.1	215.2	19	81	0.20	1.52	12

Source: AER RIN data, worksheet 6.3: http://www.aer.gov.au/node/483,

Table 6 shows average SAIDI and SAIFI indexes for all Australian DNSP;s from 2007 to 2013. It is worth noting that while ActewAGL has low rates of unplanned outages, it has the highest rates of unplanned outages, across the NEM, for both commonly used measures of reliability; SAIDI and SAIFI. Notwithstanding ActewAGL reported consumer feedback that planned outages are preferred to unplanned outages, the very high proportion of planned outages is excessive.

Given the high levels of undergrounding of cables for the ActewAGL network, the highest proportion of customers on urban feeders in the NEM and a comparatively low exposure to

 $<sup>^{23}</sup>$  ActewAGL Distribution Energy Consumer Reference Council, Meeting 1 Communique, 8 December 2014

extreme weather events, these very high levels of planned interruptions belie the proposition that ACT consumers are well served with a reliable network. Rather, we suggest that the data supports the benchmarking data that indicates that ActewAGL is not particularly efficient and so can improve efficiency, including reliability, by utilising resources more effectively.

# 5.7 Incentive payments

The Australian regulatory process is 'incentives based', with incentives for businesses to operate their businesses efficiently and to share efficiency dividends with consumers. There are four Incentive schemes in play for this regulatory process: Efficiency Benefit Sharing Scheme (EBSS), Capital Expenditure Sharing Scheme (CESS), the Service Target Performance Incentive Scheme (STPIS) and the Demand Management Incentive Scheme (DMIS).

We consider these, briefly, in turn.

EBSS: We contend that the major benefits that the businesses have received over the past regulatory period have been at a cost to consumers; there has been no 'sharing of benefits.' Consequently, there is capacity for improved sharing with consumers for the coming period. We therefore support the AER decision not to apply the EBSS to expenditure for 2015-19.

CESS: We note the AER's draft decision to retain the CESS for 2015-19.

STPIS: We agree with the AER approach of improving performance standards, a continuous improvement approach, rather than maintaining past standards which have been met easily, or minimum jurisdictional standards as some businesses have proposed. For the overall STPIS, the AER says in the draft determination that 'a lower powered incentive would balance the risk to both consumers and [DNSP's]'. Given that consumers have seen little benefit from incentive schemes, in general, over recent years, we suggest that 'continuous improvement incentives' are needed, so that there is improved consumer benefit over the regulatory period and we encourage the AER to consider this in making the final determination.

DMIA: We opine that the regulatory proposals are sadly lacking in consideration of demand management opportunities and support the AER in continuing part A of this scheme for 2015-19, with an allowance of \$100k, per year. We would hope that ActewAGL will have improved demand management experience by the time of the next regulatory period.

#### 6 Is a transition necessary?

The idea of a transition 'glide path' seems to have become a widely discussed notion and we provide some additional consideration of this here, and for completeness reiterate a few of the points we have made earlier.

Firstly it is clear to us that, relative to what ActewAGL is seeking and what the AER has allowed, the AER's Draft Decision appears to be a significant change. Comparing the fouryear revenue allowances in the draft decisions and the allowance for the last period, the reduction is 32%, on the revised ActewAGL proposal. A large part of this reduction is actually related to the risk free rate which is not a regulatory decision. While the AER's Draft Decision may seem significant in comparison to the decision for the last regulatory control period, by comparison to the previous two revenue controls the picture is most certainly not in the best, or better, interests of consumers, and very much in the better interests of the business and its owners.

Second, we would like to correct a perception that the AER's cuts are somehow very different to those adopted for example by Ofgem the UK. In its latest revenue control for the British distributors Ofgem has proposed a reduction in prices of more than 20% for three distributors, and on average reductions of 12%. Unlike Australia, the relative reduction in the risk free rate is much less significant in the UK than here. These comparable reductions are therefore, relatively, far higher than those proposed by the AER. Ofgem and its predecessor has made a series of very significant one-off price reductions – many far higher than the AER has proposed - from its first (re-opened) distribution price control in 1995 and in its four subsequent controls.

Thirdly in relation to debt costs in particular, we can see no good reason for consumers to continue to pay for debt charges that are significantly higher than the actual cost of debt. We can therefore see no good in a transition for debt cost allowances and note that there is no obligation on the AER under the Rules to provide any form of transition here.

In relation to a point raised most vehemently by ActewAGL, we see no reason why the AER should feel bound by industrial relations obligations and staffing regimes established by the ACT Government / ActewAGL. The AER's decision should be guided by the long term interest of consumers. ActewAGL has claimed that significant job losses will result from the draft determination. We note that on 1<sup>st</sup> July 2013, there were job cuts implemented by ActewAGL, instigated by the company's management, without any recriminations targeted at the regulator, and no transition strategy was sought. The Canberra Times<sup>24</sup> reported on 2<sup>nd</sup> July 2013 "Up to 150 AGL call-centre staff in Canberra, including senior people, have been told to relocate to Melbourne or Adelaide or accept redundancies." They further reported "Staff in Adelaide are reportedly paid \$12,000 less than their Canberra counterparts, and Melbourne's staff are on about \$8000 less." We have no problems with businesses paying their staff a higher rate of pay than comparable businesses do, however expecting energy customers to meet the entirety of this generosity is simply not acceptable,

<sup>&</sup>lt;sup>24</sup> http://www.canberratimes.com.au/act-news/up-to-150-job-losses-as-agl-closes-canberra-call-centre-20130702-2p9hc.html

the higher wages paid by ActewAGL need to be met, at least in part, by contributions from the shareholders too.

There have been claims about adverse impacts on the ACT economy through job cuts that ActewAGL alleges will flow from application of the draft determination. However, noting that ACT has the highest proportion of businesses with electricity debt in Australia (figure 5), there is a high likelihood that lower electricity costs to business, through more efficiently priced electricity, will in fact provide a stimulus for jobs expansion by businesses now able to spend more on labour than electricity.

For these reasons, we conclude that a transition period is unnecessary and would simply result in customers continuing to pay more than they should.

# 7 Summary of main points

We do not support the concerns raised by the networks that the AER allowed revenue will put at risk safety, reliability or job security. These concerns confuse the nature of the role of the AER. The AER does not tell the businesses how they should spend their total revenue allowances. The AER sets an overall limit and it is then a business management decision as to how each business apportions that revenue allowance between the various costs of the business. This includes the business decision on how much of the revenue allowance it will take in profit. So if a business, for example, wishes to spend more on safety, it might do so by spending less of its revenue allowance on profit, or on top management salaries etc. We consider that the amounts of revenue set by the AER will provide more than sufficient for the businesses to meet all their requirements. If management decisions about staffing levels, work practices or expenditure priorities mean that the allowed revenue is exceeded, it is up to those to whom management reports – the shareholders – to put in place mechanisms to ensure the business is run efficiently, or to bear the cost of the inefficiency themselves.

From our perspective, the AER's draft determinations for the ActewAGL network businesses (distribution and transmission) should set the baseline for revenues, assets, WACC and expenditure constraint. Compromises have already been made and back-tracking from here would be unwise, and certainly not in the best interests of consumers. We have indentified areas where further gains for consumers can reasonably be made.

Opex and capex allowance seem roughly reasonable although some "adjustments" to the benchmarking to narrow the VIC-ACT (more efficient – less efficient) gap is important and needs to be addressed. The benchmarking conducted by the AER is a legitimate and important component of regulatory process that has been relatively unsophisticated in application in Australia in the past. The AER has applied a significantly more sophisticated benchmarking approach for this determination process.

The allowance for debt is too high and BBB as the basis for debt cost calculations do not reflect actual DNSP borrowing costs and consequently its use is flawed. The AER must have regard to actual borrowing costs, which are low now in a global, low interest financial environment.

ActewAGL has yet to recognise the significant inefficiencies that consumers have been pointing to for years. However, despite excessive costs, the regulatory outcomes have nonetheless delivered excessive profits. This must end. Shareholders, not consumers, must bear the consequence of inefficiency.

There is no reason for a transitional period to be instigated since a significant proportion of the reduction in revenue proposed in the draft determinations is from a lower risk free rate, so lower capital costs for the businesses. This business is also highly profitable and has more than adequate revenue to move to the lower cost environment that flows from maintaining at least the draft determinations as the final determinations.