ActewAGL Distribution Determination 2009-14

Revised Regulatory Proposal to the Australian Energy Regulator January 2009

ActewAGL Always.

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January 2009

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Overview

This revised regulatory proposal addresses matters raised by the Australian Energy Regulator's (AER's) *Australian Capital Territory Distribution Determination 2009/10 to 2013/14: Draft Decision* (the draft decision), which was released on 28 November 2008. ActewAGL Distribution submits this revised regulatory proposal in accordance with the requirements set out in Appendix 1 of Chapter 11 of the *National Electricity Amendment Rules* (the transitional *Rules*).

Revised expenditure proposals

ActewAGL Distribution submits the following revisions to its standard control services expenditure forecasts in the regulatory proposal that was submitted to the AER on 2 June 2008 (the original proposal):

- $3.7 million[1] in capital expenditure and $0.9 million in operating expenditure has been added to the original expenditure proposal for 2009-14 to meet the AER's requirements for service target performance incentive scheme reporting. ActewAGL Distribution foreshadowed in the original proposal that the forecasts would be revised when further details of the requirements were released. The AER provided further details in the draft decision;

- $0.3 million in capital expenditure and $48.8 million in operating expenditure has been added to the original expenditure proposal for 2009-14 to take account of the impact of the Australian Capital Territory (ACT) feed-in tariff scheme. In light of new information not available at the time of the original proposal, ActewAGL Distribution has included a forecast of the costs associated with the new scheme in this revised proposal. The forecast includes a proposal for a new adjustment mechanism, and has also led to a revision to proposed expenditures excluded from calculations under the Efficiency Benefit Sharing Scheme;

- a revised set of input cost escalators has been adopted in response to the draft decision. The AER's updated values for the electricity, gas and water (EGW) industry labour escalator, and aluminium, steel, oil and copper escalators have been applied. ActewAGL Distribution proposes a revised corporate services labour escalator, retail labour escalator and indirect labour escalator. The lag on the impact of commodity prices has been retained. The revisions to the escalators result in a $6.7 million increase in forecast capital expenditure and a $2.0 million reduction in operating expenditure, compared to the original proposal, over the 2009-14 regulatory period;

- ActewAGL Distribution provides a revised set of inflation forecasts for the period 2008/09 to 2013/14;

[1] All values are in 2008/09 dollars unless otherwise stated.

- after analysis of new information, the AER's methodology for the calculation of equity and debt raising costs in the draft decision has not been adopted, and ActewAGL Distribution proposes an alternative;
- ActewAGL Distribution has made a small revision to the original self insurance proposal;
- the AER's draft decision value for the Utilities (Network Facilities) Tax forecast has been incorporated;
- the AER's amendments to ActewAGL Distribution's proposed Roll Forward Models (RFMs) have been adopted, noting that inflation for 2008/09 will be updated in the AER's final decision. Revised escalators account for a slight adjustment to ActewAGL Distribution's estimated 2008/09 capital expenditure; and
- ActewAGL Distribution's accepted Tax Asset Base RFMs have been retained, noting that inflation for 2008/09 will be updated in the AER's final decision. Revised escalators account for a slight adjustment to ActewAGL Distribution's estimated 2008/09 capital expenditure.

Revised energy forecast

ActewAGL Distribution submits a revised energy forecast. As required by the AER in the draft decision[2], the energy forecast in the original proposal has been updated for the latest financial year actual energy sales data. ActewAGL Distribution has also updated the forecasting models to include the latest available ACT economic growth forecasts and other data, and incorporated estimated price impacts of the Australian Government's Carbon Pollution Reduction Scheme (CPRS) based on information contained in the Government White Paper released in December 2008.[3]

The revised energy consumption forecast for the 2009-14 regulatory period is 2.0 per cent lower than the forecast in the original proposal. The forecast average annual growth rate over the period is 0.23 per cent, compared with 1.58 per cent in the original proposal. The main driver of the lower growth rate is the expected significant electricity price increase following the introduction of the CPRS in 2010. The expected slowdown in economic growth also explains the lower energy growth forecast.

Revised cost of capital

ActewAGL Distribution submits revisions to two elements of its proposal for calculating the cost of capital.

[2] Australian Energy Regulator 2008, *Australian Capital Territory distribution determination 2009-10 to 2013-14 Draft Decision*, 7 November 2008, p 52
[3] Australian Government December 2008, *Carbon Pollution Reduction Scheme: Australia's Low Pollution Future: While Paper,* Volume 2

In response to recent unanticipated and unprecedented changes in global financial markets, ActewAGL Distribution provides a revised proposal relating to the averaging period necessary for the calculation of the risk free rate and debt margin. Details of this proposal are provided in confidential attachment 10.

In addition, ActewAGL Distribution considers that the methodology relied upon by the AER to calculate the debt margin underestimates the Australian benchmark corporate bond yields corresponding to a BBB+ credit rating and a maturity of 10 years.

ActewAGL Distribution considers that the CBASpectrum BBB+ fair value is likely to provide a more accurate estimate of true 'fair value' than would be derived from relying solely on Bloomberg.

Accordingly, ActewAGL Distribution submits a revised weighted average cost of capital of 10.31 per cent.

Revised self insurance allowance

ActewAGL Distribution does not agree with the majority of the AER's draft decision on self insurance, and therefore much of the proposed self insurance allowance in the original proposal has been retained in the revised proposal. ActewAGL Distribution has, however, revised its original forecast such that certain events not accepted by the AER for self insurance in the draft decision (earthquakes exceeding 5 on the Richter Scale and major fires ignited by a nature or a third party) are included as defined pass through events. ActewAGL Distribution's responses to matters arising from the AER's conclusions on self insurance, including counter-arguments to the AER's position and support for reaffirming elements of the original proposal, are set out in chapter 5.

Revised cost pass through events

ActewAGL Distribution submits revisions to the AER's proposed revised definition of a *Major Natural Disaster* pass through event, to more clearly reflect circumstances intended to be covered under this event. ActewAGL Distribution also proposes that a *Force Majeure* event, approved for the NSW distribution network service providers, be similarly applied to ActewAGL Distribution.

Impacts of the revisions

The impact of the revisions for standard control services is summarised in Table 0.1.

ActewAGL Distribution's revised standard control capital expenditure for the next regulatory period is $11.0 million (or 3.8 per cent) higher than the original proposal of $286.6 million. The major drivers of the increase are new reporting requirements associated with the AER's STPIS (an additional $3.8 million) and revisions to the cost escalators, including updates for the latest available economic data, as required in the draft decision.

The revised standard control operating expenditure for the next regulatory period is $53.1 million (or 17.4 per cent) higher than the original proposal. Operating expenditure associated with the new ACT feed-in tariff scheme is the main driver, adding $48.8 million over the period. Direct tariff costs associated with the feed-in tariff scheme account for 98.8 per cent of the additional $48.8 million operating expenditure.

The revised revenue requirement is $30.5 million higher (in net present value terms) than the original proposal. The impact of higher proposed capital and operating expenditure is partly offset by the impact of the downward revision of the nominal vanilla WACC, from 10.70 per cent in the original proposal to 10.31 per cent in the revised proposal.

Table 0.1 – Standard control services - revisions

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	**Total**
Original Proposal*						
Net capital expenditure	79.9	59.8	53.5	53.0	40.3	**286.6**
Operating expenditure†	58.7	59.8	61.0	62.9	63.1	**305.5**
Smoothed revenue requirement ($ nominal)	145.6	154.7	164.3	174.5	185.4	**606.6^**
X factor (%)	+20.37	+2.00	+2.00	+2.00	+2.00	**n/a**
AER Draft Decision						
Net capital expenditure	77.7	58.2	51.9	51.2	38.9	**277.9**
Operating expenditure	57.3	58.2	59.1	60.8	60.6	**296.0**
Smoothed revenue requirement ($ nominal)	137.5	146.1	155.3	165.0	175.3	**586.5^**
X factor (%)	+13.82	+2.00	+2.00	+2.00	+2.00	**n/a**
Revised Proposal						
Net capital expenditure	69.0	63.4	60.9	53.4	50.9	**297.6**
Operating expenditure	63.5	68.0	72.1	76.3	78.6	**358.5**
Smoothed revenue requirement ($ nominal)	158.6	162.7	171.4	180.6	189.8	**643.31^**
X factor (%)	+28.69	+2.00	+2.00	+2.00	+2.00	**n/a**

* Including the $8.9m capex adjustment for correction of cost escalation calculations

† Including UNFT, debt raising costs and self insurance costs

^ Net present value using relevant nominal vanilla WACC as the discount rate

ActewAGL Distribution's revised proposal for alternative control services incorporates relevant elements of the standard control services revisions as well as additional expenditures relating to the implementation and operation of the new ACT feed-in tariff scheme. Details are provided in section 2.9. The revised revenue requirement and price path proposal are described in chapter 6.

Responses to other elements of the draft decision

ActewAGL Distribution also takes this opportunity in this revised proposal to address matters raised by the AER's draft decision in the following areas:

- cost pass through;
- requirements for allocation of customers to tariff classes;
- aspects of the control mechanism for standard control services;
- the demand management incentive scheme;
- negotiable components criteria; and
- customer price impacts.

Responses are set out in chapter 7 of this revised regulatory proposal.

1. Introduction

1.1 Background

On 2 June 2008 ActewAGL Distribution submitted its regulatory proposal for the 2009-14 distribution determination to the Australian Energy Regulator (AER). The AER undertook a preliminary examination and on 27 June 2008 notified ActewAGL Distribution that the regulatory proposal and supporting information complied with the relevant requirements of the *National Electricity Rules* (NER).[4] The AER then commenced a public consultation and review process. The review involved a detailed examination by the AER and its specialist consultants of all aspects of the regulatory proposal. ActewAGL Distribution responded to more than 200 questions from the AER and its consultants, and engaged in a number of meetings, site visits and a public forum.

On 28 November 2008 the AER released the *Australian Capital Territory Distribution Determination 2009/10 to 2013/14: Draft Decision* (the draft decision). While the AER's draft decision accepted some key elements of ActewAGL Distribution's regulatory proposal – for example the proposed scope of the capital expenditure program and the proposed demand and energy forecasting methodology[5] – several elements of the original proposal were not accepted and the AER adopted alternative values for all of the cost building blocks.

This revised regulatory proposal addresses matters arising out of the draft decision.

1.2 Transitional *Rules* requirements

Appendix 1 of Chapter 11 of the *National Electricity Amendment Rules* (the transitional *Rules*) provides an opportunity for a distribution network service provider (DNSP) to submit a revised regulatory proposal in response to an AER draft decision. Clause 6.10.3(b) of the transitional *Rules* specifies that the DNSP may only make revisions so as to incorporate the substance of any changes required to address the matters raised by the draft distribution determination or the AER's reasons for it.

The transitional *Rules* (clause 6.10.3(c)) also specify that a revised regulatory proposal must comply with the requirements of, and must contain or be accompanied by the information required by any relevant regulatory information instrument. ActewAGL Distribution's revised expenditure forecasts and energy forecasts are provided in the 'Input' worksheet of the AER's post tax revenue model (PTRM). The revised revenue requirement and X-factors are also determined using the AER's financial models, as set out in the Regulatory Information Notice (RIN) issued to ActewAGL Distribution by the AER on 24 April 2008. The revised proposal is accompanied by the directors' certification and Chief Executive Officer statutory declaration which form attachments 17 and 18 respectively.

[4] AER, letter to ActewAGL, 27 June 2008
[5] AER *Draft Decision*, pp xxi and xx

Each element of ActewAGL Distribution's revised proposal has been developed in accordance with all relevant aspects of the transitional *Rules*.

1.3 Scope of ActewAGL Distribution revised regulatory proposal

ActewAGL Distribution's revised regulatory proposal includes:

- forecasts for new capital expenditure and operating expenditure arising from matters raised in the draft determination (that is, expenditures to meet the AER's Service Target Performance Incentive Scheme (STPIS) reporting requirements and to meet ActewAGL Distribution's obligations under the new ACT feed-in tariff scheme);
- revised values for some components of the original capital expenditure and operating expenditure forecasts and the proposed revenue requirement. In some cases these revisions adopt the requirements in the draft decision, while in other cases ActewAGL Distribution has proposed alternative values to address matters raised by the draft decision;
- revised energy forecasts;
- a revised estimation of the weighted average cost of capital; and
- some revisions to cost pass through measures.

The revised proposal also contains ActewAGL Distribution's responses to other aspects of the AER's draft decision. In these areas, ActewAGL Distribution does not propose any revisions to its original proposal and considers that these components of its original regulatory proposal remain reasonable and appropriate. The additional information and analysis provided in this revised proposal is supplementary and addresses matters raised by the draft decision.

1.4 General comments on the draft decision

The *National Electricity Law* (*NEL*) and the transitional *Rules* provide the regulatory framework for ActewAGL Distribution's regulatory proposal and the AER's distribution determination. As detailed in the original regulatory proposal, as well as in the relevant sections of this revised proposal, ActewAGL Distribution has been careful to ensure that all the relevant objectives, criteria and factors in the *NEL* and the transitional *Rules* are met or addressed.

In the introductory comments of the draft decision the AER notes that it is:

> required to provide ActewAGL with the opportunity to recover sufficient revenues to meet the efficient costs of providing its direct control services and complying with regulatory obligations.[6]

[6] AER *Draft Decision*, p 2

ActewAGL Distribution considers that aspects of the draft decision are inconsistent with this requirement. For example, the draft decision on cost pass through means that ActewAGL Distribution may, if certain events arise, be unable to fully recover the efficient costs of delivering direct control services and complying with its regulatory obligations and service standard requirements.

The transitional *Rules* provide the criteria, factors and objectives that must be applied in determining the efficient costs of delivering direct control services. The AER must accept the expenditure forecasts if it is satisfied that they reasonably reflect a realistic expectation of the demand forecast and cost inputs required to achieve the expenditure objectives.[7]

ActewAGL Distribution is concerned that the AER has rejected expenditure forecasts without establishing that they are unreasonable. For example, in relation to self insurance the AER has rejected ActewAGL Distribution's proposal (which has actuarial sign-off to be determined on a reasonable basis), without providing sufficient reasons or evidence as to why it considers the proposed approach unreasonable. Furthermore, the AER has not shown that the alternative values it has adopted for the self insurance allowance are reasonable.

In some cases the AER has accepted the *methodology* for the expenditure forecasts, but not accepted the forecast *values,* replacing them with forecasts that have been published since the original proposal was submitted. ActewAGL Distribution understands that it may be consistent with the transitional *Rules* to replace original forecasts with updated versions, using the same methodology, where significant changes in the forecast setting or economic environment mean that the original forecasts are no longer realistic. However, the potential for updating key parameters leaves ActewAGL Distribution vulnerable to a significant regulatory risk where values could be changed at the time of the final decision, denying ActewAGL Distribution an opportunity to review and respond during the designated review phase.

ActewAGL Distribution is particularly concerned that there is the potential for AER to not only update the forecasts using the proposed methodology, but also to reconsider the methodology used. For example, for the steel price forecast the AER says that it will "reconsider the appropriateness of using forecasts for these markets should a more direct and robust source arise in the future"[8]. ActewAGL Distribution believes that such uncertainty in relation to a reconsideration for the final decision would be unreasonable.

These general concerns are discussed in more detail in the following chapters on specific matters arising from the draft decision.

[7] Transitional *Rules*, clauses 6.5.6(c) and 6.5.7(c)
[8] AER *Draft Decision*, p 241

2. Revised expenditure forecasts

2.1 Overview of the regulatory proposal and the draft decision

2.1.1 ActewAGL Distribution proposed expenditure forecasts

ActewAGL Distribution's original proposal included a forecast capital expenditure program of $277.7 million ($2008/09) for 2009-14, which is 71 per cent higher than actual and estimated capital expenditure over the 2004-09 regulatory period.[9] The main components of the forecast capital expenditure are:

- major supply augmentation projects—including two new zone substations (the first to be built in the ACT since 1994), plus augmentation of a third—involving total expenditure of $43.8 million ($2008/09) over the period;
- the Southern Supply Point Project—required by the ACT Government and involving expenditure of $22.5 million over the period; and
- the pole replacement program—involving expenditure of $51.1 million over the period.

ActewAGL Distribution's original forecast operating expenditure was $306 million ($2008/09), which is 81 per cent higher than actual and estimated operating expenditure over the 2004-09 regulatory period. The main drivers of the forecast increase are:

- wage increases – labour costs are rising at a faster rate than the general increase in prices in the economy due to shortages of skilled labour and consequent requirement for strategies to engage and retain staff;
- taxation – inclusion of the ACT Government's Utilities (Network Facilities) Tax (UNFT) in operating expenditure, treated as a pass through in the current regulatory period, has resulted in a step increase in operating expenditure;
- self insurance costs – not previously claimed for recovery, for risks faced by the business where insurance cover is impractical or unavailable;
- planned maintenance – higher expenditure levels for pole and minipillar inspections, and vegetation management will continue into the next period as major drivers of planned maintenance, but other planned overhead maintenance costs will increase due to required pole-top and cross-arm maintenance and installation of vibration dampers and low-voltage network line spreaders. Reactive maintenance is forecast to remain nearly constant at current period levels; and
- relocation of the ActewAGL Corporate Headquarters.

[9] In September 2008, ActewAGL Distribution submitted to the AER a revision for errors in the cost escalators. The revision added $8.9 million to the original capital expenditure forecast.

ActewAGL Distribution's capital and operating expenditure forecasts have been developed to ensure compliance with the expenditure objectives, criteria and factors set out in the transitional *Rules*.

2.1.2 AER draft decision

The AER's conclusions on ActewAGL Distribution's proposed capital expenditure program are set out in chapter 8 of the draft decision. The AER concluded that the scope of ActewAGL Distribution's forecast system capital expenditure program was appropriate and necessary. The AER was also satisfied that the proposed unit rates and the deliverability of the proposed program were consistent with the requirements in the transitional *Rules* and that ActewAGL Distribution had observed appropriate processes and procedures in determining the scope, timing and need for key capital expenditure projects.

While the AER was satisfied that the scope of the forecast system capital expenditure program was appropriate and necessary, it considered ActewAGL Distribution's application of input cost escalators did not reflect a realistic expectation of the efficient cost inputs required to achieve the capital expenditure objectives as set out in the transitional *Rules*. Following its review of the Sinclair Knight Merz (SKM) cost escalation methodology and audit of new data availability, the AER modified the input cost escalators used by ActewAGL Distribution in its regulatory proposal. This is discussed in section 2.2 below.

The AER's conclusions on ActewAGL Distribution's proposed operating expenditure are set out in chapter 9 of the draft decision. The AER accepted the use of zero base estimates for some operating expenditure components as well as extrapolation of base year operating expenditure for the remaining categories. The AER also considered that the proposed base year represented an efficient amount from which to forecast operating expenditure in the next regulatory period.

The AER did not accept ActewAGL Distribution's proposed labour cost escalators, and replaced them with alternative values. The AER accepted ActewAGL Distribution's proposal to escalate non-labour operating expenditure input costs by expected inflation, but it adopted its preferred forecasts of Consumer Price Index (CPI) growth. Cost escalators are discussed in section 2.2 below.

The AER's conclusions in relation to expenditure associated with the feed-in tariff and the STPIS reporting requirements are discussed in sections 2.3 and 2.4 below. The AER also made adjustments to ActewAGL Distribution's proposed UNFT allowance (discussed in section 2.5) and did not accept ActewAGL Distribution's proposed self insurance allowance. This is discussed in section 2.6 and chapter 5 of this revised regulatory proposal. The AER also adopted a different methodology for determining debt raising costs (discussed in section 2.7).

2.1.3 Wilson Cook's assessment of base year operating expenditure

The AER's review of ActewAGL Distribution's expenditure proposals included consideration of the findings of its consultants Wilson Cook and Co. (Wilson Cook). In relation to the

efficiency of base year operating expenditure, the AER concluded that ActewAGL Distribution's 2006/07 audited actual operating expenditure:

> …represents an efficient amount from which to forecast opex in the next regulatory control period.[10]

In doing so, the AER did not agree with the assessment by Wilson Cook regarding the efficiency of ActewAGL Distribution's base year operating expenditure.

ActewAGL Distribution considers that Wilson Cook's conclusions regarding the efficiency of the base year operating expenditure was based on a flawed analysis. Wilson Cook stated that they had formed their view by considering, amongst other things, the cost drivers unique to ActewAGL Distribution's operating and maintenance activities.[11] An analysis of their methodology, however, shows that they did not do this.

Wilson Cook asserted that ActewAGL Distribution's proposed base year operating expenditure was around 20 per cent above the industry norm and that this conclusion was based on a consideration of those cost drivers unique to ActewAGL Distribution's operating and maintenance activities. However, Wilson Cook did not attempt to incorporate these unique factors into the quantitative analysis on which their benchmarking conclusion was based. Quantifying the unique factors significantly alters the results, and invalidates the Wilson Cook conclusion. For example, Wilson Cook notes that one difference between ActewAGL Distribution and other DNSPs is that:

> ActewAGL leases its motor vehicles and computer equipment, resulting in higher corporate overheads compared to companies that own these assets.[12]

Using Wilson Cook's methodology[13] ActewAGL Distribution has adjusted for the impact of leasing costs. The impact is significant. The difference between ActewAGL Distribution's actual base year operating expenditure and Wilson Cook's predicted efficient operating expenditure falls to below 12 per cent which is then comparable to another DNSP considered by Wilson Cook to be at an efficient level of base year operating expenditure. Furthermore, ActewAGL Distribution notes that a thorough analysis would have included other ACT specific factors in addition to those listed by Wilson Cook, for example, the impact of relatively high wages in the ACT must be incorporated to normalise the analysis for benchmarking purposes. Australian Bureau of Statistics (ABS) data shows that ACT median wages have been up to 20 per cent higher than the national average over the past 5 years.[14] This has a significant impact as wages account for around 70 per cent of operating expenditure.

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[10] AER *Draft Decision*, p 90
[11] AER *Draft Decision*, p 89
[12] AER *Draft Decision*, p 89
[13] As set out in the spreadsheets provided by Wilson Cook on 28 September 2008
[14] Data from ABS 2009, *1350.0 - Australian Economic Indicators, Jan 2009: Chapter 9: State comparisons,* Table 20 shows that Average Weekly Total Earnings of Employees in the ACT from 2003/04 to 2008/09 have been 19.4 per cent higher than those for Australia as a whole.

ActewAGL Distribution supports the AER's finding in relation to the efficiency of its base year operating expenditure and notes that the unique factors relevant to the ACT must be included and normalised in any benchmarking assessment.

2.2 Cost escalation

2.2.1 ActewAGL Distribution proposed escalators

In recent years it has become more complex to escalate future costs, as the factors influencing the different utility service cost components have had increased volatility and been subject to changed market circumstances. In past periods, cost components associated with the development of capital expenditure forecasts could be expected to move broadly in line with increases in the CPI, but over the past four years in particular, the costs of utility business inputs have been growing substantially in excess of the CPI.

ActewAGL Distribution commissioned SKM to provide an independent and systematic assessment of the escalation factors that apply to capital programs and projects for the period from 2007/08 to 2013/14. SKM studied relevant historic and forecast data and developed a comprehensive cost escalation modelling process that captures the likely impact of input cost drivers on future electricity infrastructure pricing.

The SKM methodology also notes that price changes in some input cost components will not be reflected immediately in the cost of capital expenditure components purchased. The input cost escalators assumed to have a delayed price impact are aluminium, copper and oil.

2.2.2 AER draft decision

The AER's draft decision on the proposed input cost escalators is set out in appendix G to its draft decision. The AER draft decision was to reject all of the proposed cost escalators, and substitute its preferred set of cost escalators. The AER believes that more recent data is reflective of the input costs ActewAGL Distribution is expected to face during the next regulatory control period.

The AER also asserted that it did not consider that a lag between real input cost increases and real increases in capital expenditure was a reasonable assumption based on its analysis of movements between commodity and producer prices.

Based on these arguments the AER concluded that ActewAGL Distribution's cost escalation assumptions did not reflect a realistic expectation of the cost inputs required to achieve the capital expenditure objectives. The AER required ActewAGL Distribution to remodel its costs to reflect the AER's draft decision on input cost escalation.

Significantly the AER also noted that, where possible, the values of the escalators presented in the draft decision would be updated at the time of the AER's final decision and determination.

2.2.3 ActewAGL Distribution response and revised proposal

Clauses 6.5.6(c) and 6.5.7(c) of the transitional *Rules* set out the framework that limits the AER's discretion on the issue of input cost escalation.

The framework prescribes a 'presumption of acceptance' with regard to input cost escalation. ActewAGL Distribution's escalators should only be adjusted by the AER where they do not reasonably reflect a *realistic* expectation of input cost escalation. This test would need to be applied discretely to each cost escalator with, pursuant to clause 6.12.2 of the transitional *Rules*, reasons for proposed approaches on each cost escalator set out in the draft decision.

Inflation and exchange rate forecasts

Adjusting cost escalators where there is new information that proves earlier forecasts to be unrealistic is appropriate and consistent with the transitional Rules. This is the case with regard to forecast CPI growth for 2008/09, which has been impacted by the global financial crisis. Most economic commentators now expect inflation to move well above the Reserve Bank of Australia's (RBA's) 2-3 per cent target band. As such ActewAGL Distribution supports the AER's draft decision that CPI growth is likely to be around 3.75 per cent, rather than ActewAGL Distribution's expectation at the time of submission of 2.70 per cent.

However, applying preferred cost escalators that are not significantly different to those proposed by the DNSP (and in doing so, confirming that the DNSP's forecasts did not represent an *unrealistic* expectation) is inconsistent with the requirements of the transitional *Rules*. ActewAGL Distribution contests the AER's approach that automatically adopts the AER's own forecasts where they are different to that of the DNSP, regardless of whether the DNSP's forecast can be considered reasonable. ActewAGL Distribution refers to the AER's comments on the proposed exchange rate forecast:

> The AER notes that there is little apparent difference between Econtech's latest forecasts and those used as part of ActewAGL's proposal. However the AER considers that the most recent available data in Econtech's latest exchange rate forecast represents a reasonable expectation of the market conditions over the next regulatory control period.[15]

ActewAGL Distribution believes that the "little apparent difference" between the two forecasts would indicate that ActewAGL Distribution's forecast represented a realistic expectation, and must therefore be accepted (regardless of whether the AER's new forecast could also be considered reasonable). ActewAGL Distribution believes that the AER did not demonstrate that the proposed exchange rate forecast was unrealistic. Therefore the exchange rate forecast provided in ActewAGL Distribution's original regulatory proposal has been retained in this revised proposal.

ActewAGL Distribution notes significant depreciation in AUD/USD exchange rate since Econtech provided its exchange rate forecast to the AER in July 2008. ActewAGL Distribution therefore supports the AER's stated intention to obtain a revised exchange rate

[15] AER *Draft Decision*, p 243

forecast at the time of its final decision to determine whether ActewAGL Distribution's original proposal represents an unrealistic expectation.

The AER's approach to cost escalation is further highlighted in the context of inflation forecasting:

> The RBA has not yet released a [CPI] forecast for the year ending June 2010. This forecast will be available ***and adopted*** by the AER at the time of the final decision. [emphasis added][16]

ActewAGL Distribution believes that the AER should only adopt an updated 2009/10 RBA inflation forecast if there is clear and compelling evidence that it is significantly different to that proposed. Otherwise, the AER would not have demonstrated that ActewAGL Distribution's proposed forecast value was unrealistic.

ActewAGL Distribution notes that the AER has substituted the proposed CPI forecasts for 2010/11 to 2013/14, regardless of the slight difference from the proposed forecasts (Table 2.1).

Table 2.1 – Inflation forecast 2010/11-2013/14, proposal vs AER draft decision

Financial year ending June	2011	2012	2013	2014
ActewAGL Distribution proposal	2.5	2.6	2.6	2.5
AER draft decision	2.5	2.5	2.5	2.5
Difference	0.0	0.1	0.1	0.0

ActewAGL Distribution considers that the AER has therefore not demonstrated that the proposed inflation forecasts for 2010/11to 2013/14 are unrealistic.

ActewAGL Distribution's revised set of inflation forecasts incorporating AER's proposed 2008/09 and 2009/10 inflation forecasts, and retaining ActewAGL Distribution's forecasts for the final 4 years of the period, are provided in Table 2.2.

Table 2.2 – Revised inflation forecast 2008/09 to 2013/14

Financial year ending June	2009	2010	2011	2012	2013	2014
Forecast Inflation (%)	3.75	3.0	2.5	2.6	2.6	2.5

[16] AER *Draft Decision*, p 140, note (a) to table 12.3

Labour cost escalation

To ensure that the forecasts represent a reasonable expectation of input cost escalation, as required by the transitional *Rules*, labour cost forecasts for the next regulatory period should apply an escalator that is representative of the type of labour. This distinction is important as there are recognised categories of employees that are exposed to different supply and demand factors having a direct impact on market based wages and salary levels. The AER has recognised this in part of their draft decision:

> The AER accepts the application of labour cost growth rates which reflect the specific circumstances of the service which is being provided.[17]

In this case, the AER accepted ActewAGL Distribution's proposal to use specific Electricity, Gas and Water (EGW) escalators for utility industry labour. However, in the original regulatory proposal ActewAGL Distribution proposed that specific labour escalators also be applied to the labour costs associated with corporate services and retail services provided to ActewAGL Distribution. In this case, the AER has not accepted ActewAGL Distribution's proposal and has instead classified ActewAGL Distribution's corporate services and retail labour as 'general labour'.

Table 2.3 outlines the types of labour within ActewAGL Distribution's corporate service division.

Table 2.3 – Corporate services labour as at May 2008

Type of Labour	Employee Numbers	Proportion of Total
Property & Business Services	160	72%
Finance & Insurance	62	28%
Total	222	100%

'General labour' cost growth is essentially a weighted average of labour cost growth across a number of different industries. ActewAGL Distribution considers that corporate services labour could not reasonably be considered 'general labour' because 72 per cent of ActewAGL Distribution's Corporate Division has an ANZSIC specialised property and business services staff classification, while 28 per cent is specialised finance and insurance/risk management staff. ActewAGL Distribution considers that it is inappropriate to apply a general labour escalator to its specialised corporate services staff. ActewAGL Distribution notes this approach would be inconsistent with section 7A(a) of the *NEL*:

> A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in providing direct control network services…

[17] AER *Draft Decision*, p 103

It also conflicts with clauses 6.5.6(c) and 6.5.7(c) of the transitional *Rules*, which require that a DNSP's cost forecasts reflect a realistic expectation of the cost inputs required to achieve the capital and operating expenditure objectives. ActewAGL Distribution is also concerned with the AER's statement that:

> … other [sic] NSW DNSPs have applied a general wage escalator to labour associated with corporate services and this is considered appropriate for ActewAGL.[18]

The approach taken by other businesses to labour cost escalation is not a relevant consideration under ActewAGL Distribution's interpretation of clause 6.5.6(e) of the transitional *Rules*. ActewAGL Distribution also refers to clause 6.5.6(e)(2) which states that a DNSP's operating expenditure proposal must be assessed in light of the circumstances of the *relevant* DNSP.

ActewAGL Distribution reasserts that it is appropriate to apply a specific corporate services cost escalator to ActewAGL Distribution's corporate service staff for the 2009-14 regulatory period.

Similar to corporate services employees, the cost of retail labour should be escalated by a factor that is representative of that type of labour. Retail labour consists of marketing, communication and customer accounts employees. Under the ANSZIC classification this labour falls into either the "business services" category or the "finance" category.

Applying the reasoning outlined for corporate services labour, ActewAGL Distribution considers that it is appropriate to apply a specific retail labour cost escalator to the labour component of its retail costs for the 2009-14 regulatory period.

When preparing its nominal wage growth forecast for corporate services, ActewAGL Distribution reviewed and considered two different forecasts: Mercer's Quarterly Salary Review (September 2007) and Econtech's Labour Costs Growth Forecasts (August 2007), which was commissioned by the AER as part of the 2007 SP AusNet draft determination process. The Mercer report provides forecast nominal salary growth rates for a range of business and professional categories for 2009/10. Applying the relevant Mercer growth rates to each of ActewAGL Distribution's corporate salary categories resulted in a weighted average nominal growth rate for 2009/10 of 5.5 per cent.

In response to this proposal, the AER noted its concerns that:

- the Mercer forecast for 2009/10 was based on a survey of market participants; and
- ActewAGL Distribution had adopted the 2009/10 forecast for each year of the next regulatory period.

ActewAGL Distribution had deemed it to be appropriate to use this single forecast and apply it across the 2009-14 regulatory period after assessing an alternative comparative forecast by Econtech which does provide a forecast for each individual year of the price path.

[18] AER *Draft Decision*, p 104

ActewAGL Distribution notes the AER's comments in its draft decision and proposes instead the use of discrete annual forecasts for this type of labour as determined by Econtech.[19]

The proposed cost escalator for the corporate services labour is a weighted average using actual salaries of employees within each of the two categories of corporate services labour as the weights. ActewAGL Distribution considers these escalators represent a realistic expectation of corporate services labour cost growth. The proposed escalators are provided in Table 2.4.

Table 2.4 – Nominal escalation rates, corporate services labour

Financial year ending June (%)	2008	2009	2010	2011	2012	2013	2014
Property & Business Services	5.3	5.1	5.5	5.3	5.1	5.0	4.5
Finance & Insurance	6.2	7.1	6.9	6.3	5.8	5.5	4.8
Corporate Services Labour	5.5	5.6	5.8	5.5	5.3	5.1	4.6

Using a similar approach, ActewAGL Distribution has calculated an escalator for the labour component of its retail costs that is more cost reflective and reasonable than the escalator adopted by the AER in its draft decision. This is provided in Table 2.5.

Table 2.5 – Nominal escalation rates, retail labour

Financial year ending June (%)	2008	2009	2010	2011	2012	2013	2014
Property & Business Services	5.3	5.1	5.5	5.3	5.1	5.0	4.5
Finance & Insurance	6.2	7.1	6.9	6.3	5.8	5.5	4.8
Retail Labour	5.9	6.3	6.4	5.9	5.5	5.3	4.7

ActewAGL Distribution believes these escalators represent a realistic expectation of retail labour cost growth.[20]

[19] Econtech 2007, *Labour Cost Growth Forecasts, A report prepared for the Australian Energy Regulator,* 13 August 2007, Attachment D

[20] ActewAGL Distribution notes that, consistent with its stated intention, the AER has the scope to obtain updated Econtech sectoral forecasts to determine whether the August 2007 Econtech sectoral forecasts applied by ActewAGL Distribution remain a realistic expectation.

Indirect labour cost escalation

Labour costs are an important component of the costs of the capital equipment purchased by ActewAGL Distribution. These producer labour costs, also referred to as indirect labour costs in the AER draft decision, include costs associated with the design and manufacture of equipment. In the SKM model used by ActewAGL Distribution, manufacturing labour is included as one of the cost components along with other inputs such as copper and aluminium.[21]

In the draft decision the AER did not accept ActewAGL Distribution's proposed manufacturers' labour cost escalator. The AER considered that the introduction of a labour component in equipment costs was inappropriate as it:

> … represents a movement beyond the AER's obligation to provide regulated businesses a reasonable opportunity to recover efficient costs towards providing compensation for changes in input costs at a very fine level of detail. The AER considers it sufficient to monitor whether the cost of finished goods, as opposed to component parts needs to be escalated above or below the CPI.[22]

ActewAGL Distribution considers that this conclusion is not consistent with the AER's stated view on the role of cost escalation modelling. The AER stated earlier in the draft decision:

> Given that there is no futures market for the procurement and installation of electrical equipment (eg transformers, switchgear), in previous decisions cost escalations have been estimated with reference to the expected growth in key input 'cost factors'.[23]

ActewAGL Distribution considers that the AER's view that it is "sufficient to monitor whether the cost of finished goods…" is rendered invalid by its own observation that there is no futures market for electrical equipment. A reasonable forecast of equipment costs must be based on an assessment of the future key input costs, and labour is one of the key inputs.

In this revised proposal ActewAGL Distribution has retained the producer labour component in the escalation model. Some refinements have been made to the treatment of the component in SKM's model. SKM has separated out all equipment and labour (installation, commissioning etc. cost components), and the general labour escalator applied to producer labour in the original proposal has been replaced with CPI (for locally produced goods) or the trade weighted index (TWI) + CPI (as a proxy for a real TWI) for predominantly imported goods.

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[21] ActewAGL Distribution notes that the AER's description of ActewAGL Distribution's approach as 'the *introduction* of a labour component in equipment costs' (emphasis added) is misleading. The labour component, representing a cost driver that influences the final price of network equipment costs, was included in the SKM escalator model accepted by the AER in the SP AusNet determination (AER, *Final decision, SP AusNet transmission determination*). The AER's comment could be read as saying that ActewAGL is introducing a new component.

[22] AER *Draft Decision*, p 237

[23] AER *Draft Decision*, p 230

ActewAGL Distribution considers that this approach improves both the quality and transparency of the cost escalators model, and addresses the AER's concern that the proposal is not supported by robust data.

Lags in the application of escalators

In the SP AusNet determination the AER accepted that it was reasonable to apply a lag between copper and aluminium prices and equipment prices. Yet in the draft decision the AER has rejected ActewAGL Distribution's proposal to include a lag on the prices of copper, aluminium and crude oil. In relation to the lag on aluminium and copper prices the AER stated:

> The AER does not consider this is a reasonable assumption based on observed movements between commodity and producer prices.[24]

ActewAGL Distribution considers that the AER's analysis of movements between copper and aluminium prices and equipment does not properly reflect the nature of DNSP operations and is therefore not defensible, and the decision to reject the lag is unreasonable.

The correlation identified by the AER in Figures G4 and G5 [25] of the draft decision is expected and understandable, as it represents the manufacturer's *input* cost to production.

As world copper and aluminium prices are set through an open market (the London Metal Exchange (LME)), the market price encountered when purchasing these two producer price indices (PPI) components depicted within the ABS measures of PPI, should closely mirror movements in the LME.

The ABS definition for its copper materials in the PPI indices states that:

> The price indexes of copper materials measure movements in prices for copper materials used in the manufacture of three types of electrical equipment: industrial electric motors; distribution transformers; and power transformers.[26]

However DNSPs do not buy "*copper materials used in the manufacture of distribution transformers",* they purchase only the end product. The lag in commodity prices recommended by SKM during the modelling process is included to reflect the time that elapses between a manufacturer incurring an input cost (raw materials such as copper and aluminium), and the time at which the DNSP in question incurs a capital expenditure cost linked to the purchase of that item. This lag was identified within the SKM strategic procurement study undertaken in 2006.

The AER has acknowledged the shortcomings with its own analysis:

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[24] AER *Draft Decision*, p 66
[25] AER *Draft Decision*, pp 248-9
[26] Australian Bureau of Statistics 2001: http://www.abs.gov.au/ausstats/abs@.nsf/DOSSbyTopic/-4F658ADB9430751FCA256ED1007A09FC?OpenDocument

> Although the PPIs examined are imperfect proxies for the electrical equipment purchased by network businesses, the AER considers that they provide a useful indicator of the relative growth rates at various stages of production.[27]

ActewAGL Distribution considers that the AER should not reject the reasonable proposal to include a lag, when its decision is based on an analysis that does not reflect the nature of DNSP operations and has clearly identified weaknesses.

ActewAGL Distribution also notes that in relation to the crude oil escalator, the AER rejects ActewAGL Distribution's proposal to include a lag, even though the AER has undertaken no analysis to show that a lag is an unreasonable assumption.

In this revised proposal ActewAGL Distribution has retained the lag on commodity input prices.

2.3 Service Target Performance Incentive Scheme reporting requirements

2.3.1 ActewAGL Distribution regulatory proposal

ActewAGL Distribution considered the implications of the introduction of new service standard data collection obligations, and the expected implementation of the national STPIS that places revenue at risk from 1 July 2014, in its 2009-14 regulatory proposal.

ActewAGL Distribution noted in its regulatory proposal that the details of AER's proposed data reporting requirements to apply to ActewAGL Distribution in the 2009-14 regulatory period had not yet been finalised at the time of making its original submission. In addition, a national STPIS had not yet been finalised. This limited the ability of ActewAGL Distribution to provide realistic cost forecasts associated with these reporting requirements.[28]

On the basis of information available at the time of making its submission, ActewAGL Distribution included forecast costs in its regulatory proposal associated with upgrading systems to:

- model expected reliability benefits and costs to assist in understanding the incentive impacts of the national s-factor regime to apply to ActewAGL Distribution from 1 July 2014; and
- allow the automated manipulation of reliability data sets in line with the then proposed STPIS, including the application of the 2.5 beta statistical methodology.

Following submission of the ActewAGL Distribution regulatory proposal, the AER sought additional information on the proposed STPIS expenditure projects.[29] ActewAGL Distribution provided this information to the AER on 7 August 2008.[30]

[27] AER *Draft Decision*, p 249
[28] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 43
[29] Australian Energy Regulator, email to ActewAGL Distribution, 21 July 2008

ActewAGL Distribution also noted in its regulatory proposal that further clarification of annual data requirements or the requirements under the national STPIS could drive additional costs in the 2009-14 regulatory period. ActewAGL Distribution proposed that these costs could be addressed either in response to the AER draft decision, or as a pass through event.[31]

The AER wrote to ActewAGL Distribution on 1 August 2008 setting out its proposed data collection requirements to apply to ActewAGL Distribution, and seeking ActewAGL Distribution's confirmation that it would be able to comply with those requirements.[32] These information requirements mirrored those in the national STPIS, which the AER finalised on 26 June 2008.[33]

ActewAGL Distribution responded to the AER letter on 26 September 2008. ActewAGL Distribution largely confirmed its capability to comply with the AER proposed information gathering requirements, provided that relevant forecast expenditure outlined in its regulatory proposal was approved by the AER.[34] ActewAGL Distribution sought clarification, however, on the extent to which the reporting requirements and national STPIS would require ActewAGL Distribution to record all interruptions at a customer level, as well as accurately record inactive accounts.

ActewAGL Distribution noted in its letter to the AER that it had outlined in its regulatory proposal that it did not have the capability to record interruptions at a customer level. [35] ActewAGL Distribution stated in its regulatory proposal:

> ActewAGL Distribution's current network connectivity model links the upstream assets to distribution substations and individual customers are allocated to the distribution substations. In many cases, especially in commercial and multi-tenancy situations, information on customers' supply relationship between the premises and the distribution substation low-voltage circuits is not available. The next level of discrimination to supply-phase is not captured at all. All this information will be required to accurately identify part and no supply issues experienced by individual customers.[36]

In respect of a project to achieve customer connectivity, ActewAGL Distribution's regulatory proposal stated:

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[30] ActewAGL Distribution, email to Australian Energy Regulator, 7 August 2008
[31] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 44
[32] Australian Energy Regulator, letter to ActewAGL Distribution, 1 August 2008
[33] AER 2008, *Electricity distribution network service providers Service target performance incentive scheme*, June
[34] ActewAGL Distribution, letter to the Australian Energy Regulator, 26 September 2008
[35] ActewAGL Distribution, letter to the AER, 26 September 2008, p 5. While ActewAGL Distribution does manage individual customer outages, this data cannot be incorporated into overall network data at this stage.
[36] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 46

> The extension of the connectivity model to individual customers, including capturing and managing full phase connection details, would cost several million dollars, and take a number of years to complete.[37]

Both the ActewAGL Distribution regulatory proposal and letter of 26 September 2008 to the AER noted that if the reporting obligations required ActewAGL Distribution to record outages at a customer level, ActewAGL Distribution would expect that the efficient and prudent additional costs associated with upgrading relevant information systems and data capture would be recovered. The letter further stated, as did ActewAGL Distribution's regulatory proposal, that this cost recovery could occur either in response to the AER's draft decision on the regulatory proposal, or through the pass through mechanisms included in the proposal.[38]

2.3.2 AER draft decision

Chapter 13 of the AER draft decision addresses the service target performance incentive arrangements to apply to ActewAGL Distribution for the 2009-14 regulatory period. In its draft decision, the AER reaffirmed its previous decisions:

- not to introduce a STPIS which places revenue at risk in the 2009-14 regulatory period, in accordance with clause 6.6.2(k) of the transitional *Rules*; and
- to implement a data collection process in the 2009-14 regulatory period, in accordance with clause 6.6.2(h) of the transitional *Rules*.[39]

The AER also restated its intention to apply a national STPIS to ActewAGL Distribution for the regulatory period commencing 1 July 2014, and acknowledged that the scheme had not been finalised by the time that ActewAGL Distribution was required to submit its regulatory proposal to the AER.[40]

In its draft decision, the AER approved ActewAGL Distribution's proposed capital and operating expenditure required to update its data management systems.[41] The AER also confirmed that the new data reporting requirements to apply to ActewAGL Distribution for the 2009-14 regulatory period would require ActewAGL Distribution to record interruptions at a customer level, as well as accurately record inactive accounts. The AER noted that expenditure forecasts to deliver this specific capability were not included in the ActewAGL

[37] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 47
[38] The specific pass through mechanism proposed by ActewAGL Distribution in the original regulatory proposal was the *Transitional Period* pass through event due to the timing of the AER final decision on the national STPIS and data reporting obligations to apply to ActewAGL Distribution in the 2009-14 regulatory period. As discussed in section 7.1 below, the AER did not approve this proposed pass through event in its draft decision.
[39] AER 2008, *Service Target Performance Incentive Arrangements for the ACT and NSW 2009 Distribution Determinations: Final Decision*, February
[40] AER *Draft Decision*, p 142
[41] AER *Draft Decision*, pp 78 and 92

Distribution regulatory proposal[42], and that the AER expected ActewAGL Distribution to establish this capability:

> … the AER expects ActewAGL to establish capabilities to record outages at the individual customer level and observe the number of actual inactive accounts on its network, as soon as practical. This will ensure compliance with the requirements of the national distribution STPIS.[43]

In the absence of observable data with respect to inactive accounts, the AER confirmed that the use of a best estimate of the number of inactive accounts is acceptable in the short term.[44]

In its conclusions to the relevant chapter in the draft decision, which are reflected in the draft determination, the AER stated:

> The AER acknowledges that ActewAGL will need to implement additional systems and processes to achieve full compliance with the AER's national distribution STPIS by 2014, and that that [sic] full compliance may not be realised before the commencement of the next regulatory control period. To ensure that the data collection process is effective in establishing a useable data set for future target setting, the AER expects ActewAGL to implement measures to achieve full compliance with the national distribution STPIS as soon as practical, but no later than December 2009.[45]

With respect to the recovery of costs associated with achieving full compliance with the national STPIS the AER also stated:

> It is the AER's expectation that any proposal by ActewAGL to recover such expenditures would be made in accordance with the transitional chapter 6 rules, and would be assessed by the AER on its merits at the time.[46]

The draft decision also sets out the service performance data collection arrangements for ActewAGL Distribution for 2009-14.

2.3.3 ActewAGL revised proposal

ActewAGL Distribution notes the AER's confirmation that further expenditure is required for ActewAGL Distribution to be compliant with the national STPIS and data reporting requirements in the 2009-14 regulatory period. ActewAGL Distribution also notes the AER's expectation that this cost recovery be achieved within the requirements of the transitional *Rules*.

In accordance with clause 6.10.3 of the transitional *Rules,* ActewAGL Distribution therefore revises its capital and operating expenditure forecasts included in the ActewAGL Distribution

[42] AER *Draft Decision*, p 144
[43] AER *Draft Decision*, p 145
[44] AER *Draft Decision*, p 145
[45] AER *Draft Decision*, p 146
[46] AER *Draft Decision*, p 78

2009-14 regulatory proposal to include expenditure associated with a new program to establish capabilities to record outages at the individual customer level and observe the number of actual inactive accounts on its network. The revised capital and operating expenditure forecast addresses matters raised in the AER's draft decision described above, as required under clause 6.10.3(b), associated with compliance with the data reporting regime to apply to ActewAGL Distribution in the 2009-14 regulatory period. Details of the proposed project are set out in Box 2.1.

Box 2.1 – Network Connectivity Solution

This program establishes an effective network connectivity solution that, when complete, will deliver accurate and timely data compliant with the AER's reporting requirements, and provide ActewAGL Distribution with the ability to better plan and manage its network, assets, resources, reporting, fault resolution and provide customers with improved service.

Currently, ActewAGL Distribution has a large number of business systems and related databases that support numerous business functions for network and customer management. These systems and datasets are almost completely stand-alone, but related because they are used to maintain and store data that is critical to the development of a fully functioning network connectivity solution. Delivering effective network connectivity will require consolidation, upgrade and replacement of existing systems, as well as improvement and alignment of spatial and textual datasets. Considerable work is required to bring both systems and data up to a standard to deliver the required accuracy of data for reporting. Ongoing work will also be required to ensure that datasets are maintained and remain synchronised in the future. The network connectivity project is therefore divided into five phases:

1. Review, design and development of a corporate data model, which includes network connectivity data requirements
2. Review and verification of current data and system availability and capability
3. Field data collection to build full connectivity data set – update and validate information and collect new information
    a. Pilot project to verify currently-held data and collect new network data required for connectivity
    b. Mapping of full asset connectivity where current data is inaccurate and/or new data is required for connectivity
4. Development of network connectivity data within Geographic Information System (GIS) Geodatabase and related systems – continued ongoing update and management of the network connectivity systems and data
5. User tool sets – GIS viewing and analysis tools and standardised system queries reporting development.

Field data collection is a significant component of this project and key driver of project costs. Accurate information on current asset connectivity is integral to delivering a network connectivity model. It is important to undertake the pilot field data collection and validation process to allow ActewAGL Distribution to ascertain the accuracy of data that it currently holds, by comparing this data to that collected through field inspections. It is not anticipated that this project will include collection of phase-level connection data. This level of resolution would significantly add to the project costs and does not appear to be required under the national STPIS reporting requirements.

Further details of this project are provided in confidential attachment 7

Timing of network connectivity solution

ActewAGL Distribution is not currently required to report on reliability performance at a customer level. The AER annual data reporting obligations and national STPIS therefore represent new regulatory obligations. The AER's draft decision notes this, as well as noting that ActewAGL Distribution will need to implement additional systems and processes to achieve compliance.[47]

ActewAGL Distribution notes the AER's statement in its draft decision that "the AER expects ActewAGL Distribution to implement measures to achieve full compliance with the national distribution STPIS as soon as practical, but no later than December 2009".[48] As stated in the ActewAGL Distribution 2009-14 revised proposal, and reflected in the project summary and forecast costs, the development of a network connectivity solution is a complex and lengthy project, and is not expected to be complete until 2013.[49] This timing in particular reflects the complexity of the task given the data that ActewAGL Distribution currently holds, and the need for field data collection and verification.

ActewAGL Distribution notes that the AER's proposed timeframe for compliance does not reflect information included in ActewAGL Distribution's 2009-14 regulatory proposal regarding the time it would take to achieve full customer connectivity. ActewAGL Distribution will not be able to achieve full customer connectivity by November 2009 and therefore will not be able to achieve compliance with this aspect of the new data reporting requirements within the timeframe set by the AER in the draft decision.

Implications for reliability data set for application of 2014 STPIS

ActewAGL Distribution notes that a key reason that the AER is seeking early compliance with the new data reporting requirements is to ensure that a useable data set can be established for future target setting under the national STPIS.[50] ActewAGL Distribution expects that the development of a customer connectivity solution will improve the accuracy of its reliability data reporting and lead to improved customer outcomes. While achieving this, it will also lead to a disruption to its reliability data for the purposes of calculating future targets for the national STPIS. While this improvement in accuracy is desirable, the issue of data continuity under the national STPIS will need to be addressed as part of the 2014-19 regulatory determination process.

ActewAGL Distribution has investigated its ability to maintain two reliability data streams over the 2009-14 regulatory period, using current feeder-level and, when available, more accurate customer-level data derived from the connectivity model. While this approach is not ideal, it may deliver an interim solution to ensure continuity of data for the operation of the national STPIS, while also allowing scope for ActewAGL Distribution to improve the accuracy of its reliability data.

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[47] AER *Draft Decision*, p 146
[48] AER *Draft Decision*, p 146
[49] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 47
[50] AER *Draft Decision*, p 146

The AER's draft decision stated that the use of a best estimate of the number of inactive accounts is acceptable until the required level of accuracy can be achieved from the connectivity model.[51] ActewAGL Distribution confirms that it can use estimates of the number of inactive accounts for the purposes of reliability reporting, ahead of upgrading its systems to accurately record these accounts as part of achieving customer connectivity.

Forecast capital and operating expenditure

ActewAGL Distribution proposes a detailed project to achieve customer connectivity in the 2009-14 regulatory period, as set out in Box 2.1 In parallel with the capital expenditure associated with completing the project over 4 years, ongoing operating expenditure is forecast associated with maintenance of the newly created data system. ActewAGL Distribution estimates that it will require new staff members to maintain the database and ensure that information is accurate and aligned with other systems. As these requirements will build over the period, ActewAGL Distribution forecasts one additional ongoing staff member in 2009/10, growing to two ongoing staff members in 2010/11. The forecast capital and operating costs for this project are set out in Table 2.6.

Table 2.6 – Network connectivity solution – forecast capital and operating expenditure

Capex, $ million (2008/09)	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Network connectivity solution	1.4	1.5	0.3	0.4	0.0	3.7
Opex, $ million (2008/09)	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**Total**
Connectivity data management	0.1	0.2	0.2	0.2	0.2	0.9

2.4 ACT Feed-in tariff scheme

ActewAGL Distribution's 2009-14 regulatory proposal identified the likelihood that the ACT Government would establish a feed-in tariff rebate scheme in the ACT in the near future. Following submission of ActewAGL Distribution's regulatory proposal on 2 June 2008, the ACT Legislative Assembly passed the *Electricity Feed-in (Renewable Energy Premium) Act 2008* (Feed-in tariff Act), establishing a feed-in tariff rebate scheme in the ACT. This part of ActewAGL Distribution's revised submission addresses issues associated with the establishment of this scheme.

[51] AER *Draft Decision*, p 145

2.4.1 Details of the scheme

The Feed-in tariff Act is intended to encourage the take-up of micro-renewable generation across the ACT residential and small commercial sectors.[52] The feed-in tariff scheme created by the Act specifically requires ActewAGL Distribution to:

- connect the generator to the network to enable electricity generated by the generator to be supplied to the network;
- reimburse retailers for the difference between the amount payable for electricity generated by the generator and the normal cost of that electricity; and
- pass on to the occupier any additional metering costs in relation to the electricity generated by the generator.[53]

These obligations are defined as utility services under the *Utilities Act 2000* (ACT).[54]

The Feed-in tariff Act requires the responsible Minister to determine the premium rate to apply to renewable generators connected in that year.[55] That rate is to apply for 20 years after the date of connection.[56] Until the rate is determined by the Minister, the rate is set under the Act at 3.88 times the transitional franchise tariff.[57] The Feed-in tariff Act also includes a declining percentage of the premium rate in accordance with the following:

- If the total capacity of the generators is not more than 10kWh – 100 per cent of premium rate;
- If the total capacity of the generators is more than 10kWh, and not more than 30kWh – 80 per cent of premium rate; and
- If the total capacity of the generators is more than 30kWh – 75 per cent of premium rate.[58]

These percentages can be changed through an annual ministerial determination.[59]

The Feed-in tariff Act must also be reviewed at least once every 5 years after the day the Act commences.[60]

Recent statements by the ACT Minister for Environment, Water and Climate Change, Mr Simon Corbell, announced the intention of the ACT Government to amend some aspects of

[52] ACT Government, "ACT Electricity Feed-in Scheme: Presentation to Electricity Retailers" slide pack, 18 December 2008
[53] *Electricity Feed-in (Renewable Energy Premium) Act 2008* (ACT), section 6(2)
[54] *Feed-in tariff Act 2008*, section 7
[55] *Feed-in tariff Act 2008*, section 10
[56] *Feed-in tariff Act 2008*, section 11
[57] *Feed-in tariff Act 2008*, section 10(4)
[58] *Feed-in tariff Act 2008*, section 8
[59] *Feed-in tariff Act 2008*, section 9
[60] *Feed-in tariff Act 2008*, section 13

the feed-in tariff scheme before it comes into force. The Minister stated in the Legislative Assembly on 10 December 2008:

> This new regime does require a range of amendments before it can be made operational. I can inform the Assembly that the government intends to introduce an amendment bill early next year to provide for a range of matters, including capping the scheme, clarifying generator eligibility and reimbursement arrangements. This will ensure clarity and consistency in application of the tariff prior to its implementation.[61]

Minister Corbell further announced the Government's intention to undertake a public education campaign on the availability of the feed-in tariff to stimulate uptake:

> The government is also very keen to ensure that householders and the broader community are aware of how the scheme will operate. To that end, the new Department of Environment, Climate Change, Energy and Water will be undertaking a public education campaign from the beginning of next year to outline the various aspects of the operation of the feed-in tariff and how householders and other building owners can take advantage of that.[62]

The ACT Government has also recently held an information session for ActewAGL Distribution and retailers operating in the ACT on the operation of the feed-in tariff scheme.[63] In this information session, Government officials provided further information on the ACT Government's intention to amend some aspects of the Feed-in tariff Act to clarify definitions and address some technical issues that have arisen in implementing the Act. In particular, officials announced their intention to address:

- the use of kWh as a threshold limit rather than kW; and
- the lack of clarity surrounding the reimbursement amount intended by "normal cost of electricity".

These issues are outlined in the slide pack provided by ACT Government officials which is provided at attachment 7. The amendment Bill is expected to be introduced in the ACT Legislative Assembly in February 2009 and be passed in time for the scheme to commence on or before 1 March 2009.

ACT Government Officials affirmed the policy intent that the feed-in tariff scheme be funded by the wider community through network prices,[64] as well as the Government's intention to make a determination before 1 March 2009 on the feed-in tariff rate and the "normal cost of

[61] Minister Simon Corbell, Excerpt from ACT Legislative Assembly Hansard, 10 December 2008, p 17
[62] Minister Corbell, ACT Legislative Assembly Hansard, 10 December 2008, p 17
[63] ACT Government, ACT Electricity Feed-in Scheme: Presentation to Electricity Retailers slide pack, 18 December 2008
[64] ACT Government, ACT Electricity Feed-in Scheme: Presentation to Electricity Retailers slide pack, 18 December 2008, slides 4 and 9

electricity" rates to apply from the commencement of the scheme to 30 June 2010. Annual determinations will then apply from 1 July of each financial year.

2.4.2 ActewAGL Distribution regulatory proposal

ActewAGL Distribution's regulatory proposal outlined details of the then draft feed-in tariff bill.[65] ActewAGL Distribution highlighted the uncertainty surrounding the passage and final content of the draft bill, limiting the ability for ActewAGL Distribution to provide a reasonable estimate of forecast costs that would be incurred under the scheme.[66] Given this uncertainty, ActewAGL Distribution did not include any forecast costs associated with the scheme in its regulatory proposal. ActewAGL Distribution anticipated an ability to recover efficient costs incurred from 2 June 2008 through a pass through mechanism.[67]

This expectation was based on the assumption that, should the scheme come into effect in the "transitional period" defined by ActewAGL Distribution in its regulatory proposal[68], the relevant costs would be able to be recovered as a *Transitional Period* pass through event.[69] Similarly, if the scheme commenced on or after 1 July 2009, the relevant costs would be able to be recovered as a normal *Regulatory Change* pass through event. ActewAGL Distribution proposed a *Transitional Period* pass through event in its 2009-14 regulatory proposal, as provided for under the *NER*.[70]

On 2 July 2008, the ACT Legislative Assembly passed the Feed-in Tariff Act. The Act allows the responsible Minister to set the commencement date for the scheme, but requires that date be no later than 1 July 2009.

In response to this development, ActewAGL Distribution separately informed the AER of the passage of this legislation, and the potential for the feed-in tariff scheme to commence in the transitional period. ActewAGL Distribution reiterated the importance of its proposed transitional period pass through event to address this possibility.[71]

The AER provided a response to this letter on 13 November 2008. The AER confirmed that, should the feed-in tariff scheme commence on or after 1 July 2009, and on the assumption that the scheme is a defined event, it could be dealt with through normal pass through mechanisms. The AER stated, however, that the proposal to recover costs of the feed-in tariff scheme through the ActewAGL Distribution proposed *Transitional Period* pass through

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[65] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 80
[66] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 81
[67] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 82
[68] ActewAGL Distribution defined the *transitional period* as the period between the submission of the ActewAGL Distribution 2009-14 regulatory proposal and the start of the 2009-14 regulatory period, being 2 June 2008 to 30 June 2009. This is a period of significant uncertainty regarding the recovery of costs associated with approved pass through events, as outlined in the ActewAGL Distribution regulatory proposal (ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, pp 270-2)
[69] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, p 272
[70] *National Electricity Rules*, Chapter 10, Glossary, definition of *pass through event*
[71] ActewAGL Distribution, letter to Australian Energy Regulator, 23 October 2008.

event was not as straightforward.[72] The AER indicated that, if the scheme commenced before 1 July 2009, it would consider a pass through application for costs associated with the feed-in tariff only if the scheme was introduced within 90 business days prior to 1 July 2009. This position was elaborated on in the draft decision and is discussed further below.

The timing of the commencement of the feed-in tariff scheme has also been influenced by the recent ACT Legislative Assembly election. On 31 October 2008 the Australian Labor Party signed an agreement with the ACT Greens to form a minority government in the ACT. The agreement included the following commitment:

> ACT Labor, once elected to government, commits to:
>
> …
>
> 1.7 Ensuring that the Solar Feed-in Tariff is implemented as fast as possible in advance of the legislated timetable, and by 1 March 2009 at the latest.[73]

This commitment confirms the intention for the feed-in tariff scheme to commence prior to the start of the 2009-14 regulatory period, and potentially before 1 March 2009.

2.4.3 AER draft decision

The AER draft decision considered the feed-in tariff scheme as part of its discussion of the ActewAGL Distribution proposed *Transitional Period* pass through event. The AER draft decision did not approve the proposed transitional period pass through event, and stated:

> The only occasion on which the AER could accept an application for a pass through amount for an event that occurs prior to the next regulatory control period is the occurrence of a defined event within 90 business day [sic] of 1 July 2009 (the commencement date of the next regulatory control period).[74]

2.4.4 ActewAGL Distribution revised expenditure proposal

ActewAGL Distribution notes the AER's statement that, should the scheme commence up to 90 days before 1 July 2009, the AER could accept an application for pass through of costs for the next regulatory control period. Further discussion of the ActewAGL Distribution proposed *Transitional Period* pass through event and AER's response is included in section 7.1 below.

ActewAGL Distribution considers that a preferred approach to managing the specific uncertainty related to the introduction of the ACT feed-in tariff scheme through the regulatory process is to revise its capital and operating expenditure forecasts to include expenditure expected to be incurred as a result of the introduction of a new feed-in tariff scheme in the

[72] Australian Energy Regulator, letter to ActewAGL Distribution, 13 November 2008
[73] Parliamentary Agreement for the 7th Legislative Assembly for the ACT, 31 October 2008, Appendix 2 Policy Programme, clause 1.7
[74] AER *Draft Decision*, p 168

ACT. This includes revisions to forecast expenditure for both standard and alternative control services, and a proposed adjustment mechanism for direct feed-in tariff costs.

ActewAGL Distribution was not previously able to submit a reasonable forecast of the costs of the feed-in tariff scheme in its original regulatory proposal as the legislation to create the scheme had not yet passed the ACT Legislative Assembly. It therefore sought in its original proposal to ensure that these costs could be recovered through a specific pass through mechanism.

Since submitting its original proposal, the feed-in tariff scheme legislation has passed the ACT Legislative Assembly, and the ACT Government has conducted a briefing session with ActewAGL Distribution and relevant retailers on the details of the scheme. This information has enabled ActewAGL Distribution to prepare for submission a reasonable forecast of the costs associated with the introduction of the scheme, meaning that a pass through application following the introduction of the scheme is no longer necessary. ActewAGL Distribution has updated its regulatory proposal to the AER with this more recent information that was not available at the time of making its original regulatory proposal. ActewAGL Distribution considers that this approach is consistent with the requirements of clause 6.10.3 of the transitional *Rules.*

Forecast operating expenditure

Standard control

ActewAGL Distribution has developed a forecast of the direct tariff costs that it expects to incur as a result of the feed-in tariff scheme. Details of the methodology used to develop this forecast can be found in confidential attachment 9.

ActewAGL Distribution has forecast significantly increased connections of micro-renewable generators as a result of the feed-in tariff scheme. ActewAGL Distribution estimates that it will require an additional staff member to manage the expected increase in connection inquiries and applications. These costs are forecast to be $0.1 million per annum ($2008/09).

These costs assume that the AER approves forecast costs associated with developing an on-line inquiry and application facility to streamline the connection application process, as outlined in the forecast capital expenditure section below.

Alternative control

ActewAGL Distribution must in most cases install either an additional meter or new replacement meter at a site where a micro-renewable generator is being connected to the network.[75] In many cases, existing meter boxes are not suitable for the additional PV meter or replacement meter. It is therefore necessary for ActewAGL Distribution to undertake a pre-meter installation inspection at the time that a connection application is being assessed

[75] A very small proportion of sites may already have installed an interval meter capable of measuring generation output as part of the new and replacement meter capital program, and therefore do not require a new meter.

to identity any problems that may arise with the installation. This inspection avoids customer complaints and more costly on-site delays and re-scheduling of work, as well as providing the customer an up-front estimation of likely costs associated with connection.

ActewAGL Distribution estimates that it will require an additional staff member to undertake meter box inspections. These costs are forecast to be $0.1 million per annum ($2008/09).

Forecast capital expenditure

Standard control

ActewAGL Distribution intends to develop a web-based inquiry and application process to streamline the connection application process and reduce costs associated with manually handling standard connection applications. ActewAGL Distribution intends to adapt the web-based application architecture created to manage applications to ActewAGL Distribution for planning approval under the new *Planning and Development Act 2007* for this purpose.[76] The forecast costs included for this project are therefore significantly below the stand-alone costs of developing this kind of facility. ActewAGL Distribution forecasts additional standard control capital expenditure of $0.3 million ($2008/09) in 2009/10 to develop this facility.

Alternative control

ActewAGL Distribution will be required to replace additional meters as a result of the feed-in tariff scheme. ActewAGL Distribution's current meter replacement scheme is largely limited to replacing meters that are at the end of their operational life. In most cases, meters replaced as a result of the feed-in tariff scheme will not be at the end of their operational life.

ActewAGL Distribution therefore forecasts that it will need to undertake meter replacement or additional metering at each connection site. These are in addition to meters replaced as a result of the current meter replacement program. ActewAGL Distribution therefore forecasts additional metering costs of $2.7 million ($2008/09) over the regulatory period.

The Feed-in tariff Act requires ActewAGL Distribution to pass on to the occupier any additional metering costs in relation to electricity generated by the generators.[77] ActewAGL Distribution proposes to address this issue as part of its annual pricing proposal.

Table 2.7 provides a summary of annual capital and operating expenditure forecast for both standard and alternative control services.

[76] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, pp 78-9
[77] *Feed-in tariff Act 2008*, section 6(2)(c)

Table 2.7 – Annual capital and operating expenditure arising from ACT feed-in tariff scheme

Capex, $ million (2008/09)	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Standard control						
IT system (on-line application)	0.3	0.0	0.0	0.0	0.0	0.3
Alternative control						
Customer Initiated (new or replacement metering)	1.0	0.6	0.5	0.4	0.4	2.9
Opex, $ million (2008/09)	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**Total**
Standard control						
Tariff payments	3.4	6.8	10.0	12.7	15.3	48.2
Network operations expenditure (connections)	0.1	0.1	0.1	0.1	0.1	0.6
Alternative control						
Maintenance and repair (meter inspection)	0.1	0.1	0.1	0.1	0.1	0.5

2.4.5 Proposal for an adjustment mechanism

The introduction of the feed-in tariff scheme occurs at a time of increased public interest in environmental issues, and where multiple changes to environmental legislation, both nationally and internationally, are taking place. Significant technological changes are also expected over the 2009-14 regulatory period, particularly given the greatly enhanced investment in research and development into renewable technologies by the Australian government[78] and internationally[79].

While the forecast direct tariff costs are considered reasonable, there is still a significant risk that these forecasts prove to be inaccurate and ActewAGL Distribution either significantly under or over recovers the direct costs of the feed-in tariff in the 2009-14 regulatory period.

[78] For example, the $240 million *Climate Ready Program* supports the development and commercialisation of products and solutions to climate change problems, see http://www.ausindustry.gov.au/InnovationandRandD/ClimateReadyProgram/-Pages/ClimateReadyProgram.aspx; and the *Renewable Energy Equity Fund* provides venture capital and managerial advice for small, innovative renewable energy companies, see http://www.ausindustry.gov.au/VentureCapital/RenewableEnergyEquityFundREEF/-Pages/home.aspx

[79] For example, the European Union *Strategic Energy Technology Plan*, which aims to increase research to reduce costs and improve performance of existing low carbon technologies, and support development of a new generation of low carbon technologies, see http://europa.eu/-scadplus/leg/en/lvb/l27079.htm

ActewAGL Distribution does not consider that the risk of such an outcome would be in its long term interests or that of network consumers.

ActewAGL Distribution proposes to include an adjustment mechanism to correct for under or over recovery of direct tariff costs under the scheme.[80] ActewAGL Distribution considers that this approach is essential and appropriate given the uncertainty surrounding forecast uptake rates under the scheme, and the scope for changes in environmental and climate change policies, as well as technological change, to significantly influence actual costs. These factors are outside of ActewAGL Distribution's control and may significantly impact its ability to recover costs incurred under the scheme.

In doing so, ActewAGL Distribution has noted the AER's draft decision to reject its proposal to include a mechanism to adjust for differences between the forecast and actual liability for the UNFT. The AER stated in its draft decision that it did not consider that the transitional *Rules* provide scope for it to approve an adjustment mechanism for charges other than the transmission use of system (TUOS) charges.[81]

ActewAGL Distribution does not agree with the AER's conclusion that it does not have scope in the transitional *Rules* to include additional adjustment mechanisms in ActewAGL Distribution's pricing proposal.

Under section 15(2) of the *NEL*, the AER "has the power to do all things necessary or convenient to be done for or in connection with the performance of its functions". When performing a regulatory function, this power is limited by *NEL Objective* and *NEL Revenue and Pricing Principles*.[82] The transitional *Rules* do not include a specific limitation on the ability of the AER to approve an adjustment mechanism of the type proposed by ActewAGL Distribution with respect to the UNFT, or any other mechanism, except where the proposed approach is not consistent with the capital and operating expenditure criteria. These criteria require the AER to consider, amongst other things, whether the proposal reasonably reflects the efficient costs of achieving the operating expenditure objectives,[83] which include the expenditure required to comply with all applicable regulatory obligations or requirements associated with the provision of standard control services.[84] The transitional *Rules* relating to pricing proposals also do not limit what the AER can include in a proposal, and only set out what a proposal *must* include.[85] The absence of a specific power under the *Rules* therefore does not limit the scope of the AER's powers to exercise its functions in accordance with the Law.

ActewAGL Distribution is required under the Feed-in tariff Act to reimburse retailers for the difference between the feed-in tariff rate and the normal cost of electricity rate. The feed-in

[80] Note that ActewAGL Distribution does not propose that the adjustment mechanism apply to other costs forecast to occur as a result of the introduction of the feed-in tariff scheme as these costs are considered relatively controllable and amenable to forecast.
[81] AER *Draft Decision*, p 118
[82] *National Electricity Law* sections 16(1)(a) and 16(2)
[83] Transitional *Rules* clause 6.5.6(c)(1)
[84] Transitional *Rules* clause 6.5.6(a)(2)
[85] Transitional *Rules* clause 6.18.2

tariff direct costs therefore are a new regulatory obligation on ActewAGL Distribution. ActewAGL Distribution considers that, within the current regulatory framework, the most efficient approach for ensuring that direct tariff costs are recovered efficiently is through an annual adjustment to the forecast direct tariff costs to reflect actual costs in the previous period as part of the annual pricing approval process. This approach would:

- Remove the uncertainty around the forecast of direct tariff costs incurred by ActewAGL Distribution. This incurred cost is not directly controllable by ActewAGL Distribution and not compensated for elsewhere within the revised regulatory proposal;
- Allow for an adjustment each year to reflect the ACT Government's determination of the feed-in tariff rate and the normal cost of electricity rate;
- Limit the potential for ActewAGL Distribution to either over or under recover this amount due to forecasting error; and
- Avoid the administrative costs associated with pass through applications following changes in ACT Government-set tariff rates.

ActewAGL Distribution considers that these outcomes would be in the long-term interests of consumers. If the AER does not agree to ActewAGL Distribution's proposal for an annual adjustment mechanism for the actual tariff costs incurred under the scheme, ActewAGL Distribution considers that the annual Ministerial determinations for the feed-in tariff rate and the normal cost of electricity rate should be considered regulatory change events. This would enable ActewAGL Distribution to make an application to pass through changes in costs under the scheme, as discussed in the pass through section in chapter 7 of this revised proposal.

2.5 Utilities (Network Facilities) Tax

2.5.1 ActewAGL Distribution regulatory proposal

ActewAGL Distribution's original proposal included an estimate of the UNFT payable to the ACT Government in its operating expenditure forecasts. It proposed that annual adjustments be made for the difference between the forecast and actual amount of the UNFT paid to the ACT Government.

2.5.2 AER draft decision

In its draft decision, the AER stated it considers ActewAGL Distribution's forecast of UNFT obligations to be overstated and reduced the amount over the 5 years from $20.9 million to $20.7 million. Also, it considered that ActewAGL Distribution's proposed treatment of variations in its UNFT forecasts and actual liability should not be subject to adjustment through the pricing proposal as there was no provision for this in the transitional *Rules*.

However, the AER noted that an adjustment of the UNFT rate by the ACT government would constitute a tax change event, which is a pass through event. In such circumstances ActewAGL Distribution could apply to the AER to pass through the difference between the

forecast cost of the UNFT approved by the AER and the actual cost of the UNFT set by the ACT government.

2.5.3 ActewAGL Distribution response

ActewAGL Distribution accepts the AER's adjustment to its UNFT forecast and has accordingly reduced this amount from $20.9 million to $20.7 million over the regulatory period. This is reflected in the adjusted operating expenditure included in this revised proposal.

As noted above, ActewAGL Distribution considers incorrect the AER's interpretation of its scope under the transitional *Rules* to approve additional adjustment mechanisms. ActewAGL Distribution considers that the AER does have scope to approve additional adjustment mechanisms where the approval of those mechanisms is consistent the capital and operating expenditure criteria.

ActewAGL Distribution considers that its proposed adjustment mechanism to correct for actual costs of the UNFT is consistent with the operating expenditure criteria as the approach would mean that customers would avoid the costs of forecasting error resulting from changes in the UNFT rate, and the administrative costs associated with annual pass through applications.

If the AER does not agree to ActewAGL Distribution's proposal for an annual adjustment mechanism for the actual UNFT costs incurred, ActewAGL Distribution accepts the AER's proposal for the treatment of UNFT as an annual pass through event, provided that there is no materiality test that would prevent it from recovering the difference between the forecast cost and the actual cost of the UNFT through the pass through provisions. Materiality thresholds for pass through events are discussed further in section 7.1.3 of this revised proposal.

2.6 Self insurance

ActewAGL Distribution has revised aspects of its original self insurance proposal, leading to a reduction in its proposed self insurance allowance. These changes are reflected in the adjusted operating expenditure included in this revised proposal, and are discussed in more detail in chapter 5. Further information supporting ActewAGL's self insurance proposal is provide at attachment 16. The revised proposal for self insurance costs is summarised in Table 2.8. The proposed revision is, however, contingent on the AER accepting the inclusion of certain catastrophic events as pass throughs.

Table 2.8 – Revised self insurance cost forecast

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Self insurance costs	1.6	1.6	1.6	1.6	1.6	**7.9**

Note: This table refers to the total self insurance cost before allocation to standard and alternative control services.

2.7 Debt raising costs

ActewAGL Distribution submits a revised proposal relating to the calculation of debt raising costs. ActewAGL Distribution revised estimate for the total direct and indirect costs of debt raising is 15.5 basis points per annum. This proposal is supported by the Competition Economists Group (CEG) report *Debt and equity raising costs,* submitted as confidential attachment 15. The revised forecast annual debt raising cost requirement is provided in Table 2.9.

Table 2.9 – Revised debt raising cost forecast

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Debt raising costs	0.5	0.6	0.6	0.6	0.7	**3.0**

2.8 Equity raising costs

New analysis relating to the calculation of equity raising costs has become available to ActewAGL Distribution since it submitted its original regulatory proposal. Details of this analysis are provided in the CEG report *Debt and equity raising costs,* submitted as confidential attachment 15. Based on this analysis the forecast annual equity raising cost requirement is provided in Table 2.10.

Table 2.10 – Revised equity raising cost forecast

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Equity raising costs	1.1	1.0	0.9	0.6	0.5	**4.2**

2.9 Summary expenditure forecast revisions

2.9.1 Summary – revisions to the standard control capital expenditure forecasts

ActewAGL Distribution's revised standard control net capital expenditure forecasts are provided in Table 2.11. The revised proposal represents a 3.8 per cent increase in total net capital expenditure on ActewAGL Distribution's original proposal, and a 7.1 per cent increase in total net capital expenditure on the AER's draft decision.

Table 2.11 – ActewAGL Distribution revised net standard control capital expenditure forecast

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Original net capex proposal	79.9	59.8	53.5	53.0	40.3	**286.6**
AER draft decision	77.7	58.2	51.9	51.2	38.9	**277.9**
Adjustments						
Demand driven adjustment*	(13.7)	(0.1)	5.6	(1.1)	9.7	0.3
New STPIS capex	1.4	1.6	0.3	0.4	0.0	3.7
New FiT capex	0.3	0.0	0.0	0.0	0.0	0.3
Revised cost escalators	3.3	3.7	3.1	3.0	2.3	15.4
Revised net capex proposal	**69.0**	**63.4**	**60.9**	**53.4**	**50.9**	**297.6**

* The demand driven adjustments are due to deferment of some capital expenditure as a result of revised demand forecasts, as discussed in chapter 3.

2.9.2 Summary – revisions to the standard control operating expenditure forecasts

ActewAGL Distribution's revised standard control operating expenditure forecasts are provided in Table 2.12. The revised proposal represents a 17.1 per cent increase in total operating expenditure on ActewAGL Distribution's original proposal, and a 21.1 per cent increase in total operating expenditure on the AER's draft decision. Ninety per cent of this increase is related to forecast feed-in tariff direct costs.

Table 2.12 – ActewAGL Distribution revised standard control operating expenditure forecast

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Original opex proposal	58.7	59.8	61.0	62.9	63.1	**305.5**
AER draft decision	57.3	58.2	59.1	60.8	60.6	**296.0**
Adjustments						
Revised cost escalators	0.0	0.2	0.3	0.4	0.5	1.4
UNFT	0.0	0.0	0.0	0.0	0.0	0.0
Debt Raising Costs	0.2	0.2	0.2	0.3	0.3	1.2
Equity Raising Costs	1.1	1.1	1.0	0.6	0.5	4.4
Self insurance	1.2	1.2	1.2	1.2	1.2	5.8
FiT direct tariff costs	3.4	6.8	10.0	12.7	15.3	48.2
FiT (Managing Connections)	0.1	0.1	0.1	0.1	0.1	0.6
STPIS (IT)	0.1	0.2	0.2	0.2	0.2	0.9
Revised opex proposal	**63.5**	**68.0**	**72.1**	**76.3**	**78.6**	**358.5**

2.9.3 Summary – revisions to the alternative control capital expenditure forecasts

ActewAGL Distribution's revised alternative control net expenditure forecasts are provided in Table 2.13. This represents a 13.9 per cent increase in total alternative control net capital expenditure on ActewAGL Distribution's original proposal, and a 16.1 per cent increase in total net alternative control capital expenditure on the AER's draft decision.

Table 2.13 – ActewAGL Distribution revised alternative control net capital expenditure forecast

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Original net capex proposal	**5.8**	**3.2**	**3.1**	**3.3**	**3.2**	**18.6**
AER draft decision	**5.8**	**3.1**	**3.1**	**3.2**	**3.1**	**18.3**
Adjustments						
New FiT capex	1.0	0.6	0.5	0.4	0.4	2.9
Revised cost escalators	0.0	0.0	0.0	(0.0)	(0.0)	0.0
Revised net capex proposal	**6.8**	**3.7**	**3.6**	**3.6**	**3.5**	**21.2**

2.9.4 Summary – revisions to the alternative control operating expenditure forecasts

ActewAGL Distribution's revised alternative control net operating expenditure forecasts are provided in Table 2.14. This represents a 7.5 per cent increase in total alternative control operating expenditure on ActewAGL Distribution's original proposal, and a 15.2 per cent increase in total alternative control operating expenditure on the AER's draft decision.

Table 2.14 – ActewAGL Distribution revised alternative control operating expenditure forecast

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Original opex proposal	**2.2**	**1.8**	**1.8**	**1.6**	**1.7**	**9.1**
AER draft decision	**2.1**	**1.7**	**1.7**	**1.5**	**1.6**	**8.5**
Adjustments						
Revised cost escalators	0.1	0.0	0.0	0.0	0.0	0.2
Debt raising costs	0.0	0.0	0.0	0.0	0.0	0.1
Equity raising costs	0.1	0.0	0.0	0.0	0.0	0.2
Self insurance	0.1	0.1	0.1	0.1	0.1	0.4
New FiT opex	0.1	0.1	0.1	0.1	0.1	0.5
Revised opex proposal	**2.4**	**1.9**	**1.9**	**1.7**	**1.8**	**9.8**

2.9.5 Operating expenditure for EBSS purposes

The AER will apply the efficiency benefit sharing scheme (EBSS) released in February 2008 to ActewAGL Distribution for the 2009-14 regulatory control period. ActewAGL Distribution considers that the list of costs excluded from the operation of the EBSS should also include the direct feed-in tariff payment costs. The timing and quantum of these payments are outside the control of ActewAGL Distribution.

The amount of direct feed-in tariff payments relate to the uptake, size and capacity of micro-renewable generators in the ACT, which will be influenced by the tariff rate set by the ACT government each year. The level of incentive provided by the tariff is not controllable by ActewAGL Distribution. In accordance with the approach adopted by the AER in its draft decision with respect to the exclusion of the UNFT in EBSS calculations[86], ActewAGL Distribution considers that the direct tariff costs associated with the feed-in tariff scheme should similarly be excluded from the EBSS.

Equity raising costs are also excluded from the EBSS because they are not considered to be influenced by the efficiency of ActewAGL Distribution's service delivery.

[86] AER *Draft Decision*, pp 152-3

ActewAGL Distribution's revised operating expenditure proposal for EBSS purposes is provided in Table 2.15.[87]

Table 2.15 – ActewAGL Distribution revised operating expenditure for EBSS

$ (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14	Total
Revised opex proposal	63,460,982	67,967,467	72,148,483	76,323,483	78,622,786	358,523,201
Adjustments						
Debt Raising Costs	536,493	575,161	606,412	633,467	651,865	3,003,398
Self insurance	1,491,683	1,491,683	1,491,683	1,491,683	1,491,683	7,458,413
Insurance	676,583	676,583	676,583	676,583	676,583	3,382,915
Superannuation	3,231,573	3,345,072	3,449,401	3,550,261	3,633,389	17,209,696
UNFT	3,913,587	4,010,567	4,105,945	4,275,575	4,342,873	20,648,547
FiT direct tariff costs	3,372,080	6,815,832	10,036,959	12,727,878	15,268,192	48,220,941
Equity raising costs	1,147,796	1,112,318	1,018,870	648,644	511,653	4,439,282
Revised EBSS opex proposal	49,091,188	49,940,251	50,762,629	52,319,392	52,046,549	254,160,009

[87] As some of the discrete cost forecasts are not reproduced in detail elsewhere in the revised proposal, ActewAGL Distribution provides them to the closest dollar.

3. Revised energy forecast

3.1 Overview of the regulatory proposal and the draft decision

3.1.1 ActewAGL Distribution's proposed energy and demand forecasts

ActewAGL Distribution engaged SKM to prepare an independent energy and demand forecast for the ACT electricity network. SKM's forecasting methodology involved:

- a review of the variation between the 2003 forecasts and actual demand and energy consumption;
- an investigation of key drivers of energy consumption and demand in the ACT; and
- the production of system wide energy consumption, system wide demand and zone substation demand forecasts using dynamic econometric and trend modelling techniques.

Growth in energy consumption was forecast to average 1.6 per cent per annum over the 2009-14 regulatory period using an average economic growth assumption. Summer demand was forecast to continue to grow more strongly than winter demand, and at PoE10[88], the ACT is expected to transition from a winter peaking load to a summer peaking load in 2009/10.

3.1.2 AER's draft decision

The AER considered that ActewAGL Distribution's maximum demand forecast methodology and forecasts provided a realistic expectation of the demand forecast required to achieve the capital and operating expenditure objectives in the transitional *Rules*.[89]

The AER also considered ActewAGL Distribution's energy forecast methodology reasonable. it noted, however, the yearly fluctuations in historical energy consumption on ActewAGL Distribution's network. The AER considered that the forecasts should be updated to take into account the most recent energy sales data, for financial year 2007/08, to enable the AER to ensure that the forecast reflects the most recent trends in energy consumption. Accordingly, the AER requested that a revised energy forecast be submitted to the AER for consideration in its final determination. Specifically, the AER has sought a revised energy forecast using the latest financial year with verifiable energy data. In the case of ActewAGL Distribution, this is 2007/08. The new data is to be weather corrected and allocated according to the methodology applied in generating ActewAGL Distribution's original energy forecast.[90]

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[88] PoE refers to *probability of exceedance*. For example, PoE10 means 10 per cent probability of exceedance, or that the load would exceed the forecast once in every ten years. Similarly PoE50 means that the forecast will be exceeded every second year.
[89] AER *Draft Decision*, p 51
[90] AER *Draft Decision*, p 52

3.2 Updated energy sales data

The energy sales data in the energy forecasting model has been updated as shown in Table 3.1. Shaded values are preliminary at this stage.

Table 3.1 – Updated energy sales data

kWh	2007	2008
January	225,510,009	212,938,352
February	215,667,322	211,989,573
March	209,407,994	206,079,521
April	200,341,540	212,251,117
May	221,252,641	230,145,865
June	229,386,215	231,703,802
July	270,355,861	266,327,933
August	287,317,498	289,930,181
September	259,447,671	272,149,039
October	252,218,356	263,329,735
November	254,278,377	256,333,655
December	209,450,574	211,143,519
Total	**2,834,634,058**	**2,864,322,292**

Total sales for the financial year 2007/08 were 2,838,176,567 kWh, up 1.2 per cent on the forecast sales. The weather corrected actual consumption was 2,881 GWh, about 2.8 per cent above forecast.

3.3 Other updates

Consistent with the AER's preference to incorporate the latest available economic information,[91] ActewAGL Distribution has updated some other variables, in addition to the sales data, used in the forecasting model. The following updates have been incorporated:

- The ABS has reported that the growth in State Final Demand in 2007/08 was 2.2 per cent compared to a forecast of 1.75 per cent. [92]
- The ACT Government has revised the growth forecast for State Final Demand for the ACT in 2008/09 to 1.5 per cent compared to 3.75 per cent in the original model. [93] The revised forecast for average annual growth in ACT Gross Final Demand over the 2009-

[91] See for example AER *Draft Decision*, Appendix G. The draft decision requires revisions of cost escalators to take account of the latest available forecasts.
[92] ABS Series No. 5206.0, Table 21
[93] ACT Government, Mid-Year Review 2008-09, p 29

14 regulatory period is 4.70 per cent, compared with the 4.75 per cent forecast available at the time of the original proposal.

- The population and household statistics have been updated for the latest ABS estimates.[94]

The network price impacts of the draft decision have also been incorporated, along with the latest TUOS price forecasts and some additional price impacts associated with the Australian Government's CPRS, discussed further below.

A further adjustment has been made to correct for a minor error in the model. The original SKM model assumed dual fuel (gas and electricity) arrangements in the ACT started in 2000. The ActewAGL partnership was formed in October 2000. The change to marketing arrangements did not commence until 2001. Hence, the dual fuel assumptions have been modified, removing dual fuel from the year to June 2000 and treating 2000/01 as consisting of a half year with the dual fuel option.

3.4 Impacts of the Carbon Pollution Reduction Scheme

When ActewAGL Distribution's original proposal was submitted in June 2008, the Australian Government had announced its intention to introduce an emissions trading scheme.[95] The Garnaut Review[96] was in progress (draft report released in July 2008) and the Department of Climate Change was preparing a Green Paper, which was also released in July 2008.[97]

Recognising these ongoing developments, the forecasting model prepared for ActewAGL Distribution by SKM incorporated a price increase attributable to climate change policies. The model assumed the cost of 'green energy' schemes incorporated into retail electricity prices would rise to $7.09 per MWh in 2010/11 and rise evenly to $15 per MWh in 2017/18, thereby increasing retail electricity prices. However, the model assumed that the new scheme would replace the existing national mandatory renewable energy target (MRET). This MRET scheme was estimated to cost $6.47 per MWh in 2010/11. Therefore, the modelling incorporated a small net increase in prices attributable to climate change policies. This was based on the information available at the time of ActewAGL Distribution's original proposal.

In December 2008 the Australian Government released the report *Carbon Pollution Reduction Scheme, Australia's Low Pollution Future* (the White Paper). The package released with the White Paper includes detailed modelling of the likely impacts of the new CPRS. The modelling indicates that wholesale and retail electricity costs are likely to increase significantly in response to the introduction of the CPRS in June 2010. Retail

[94] ABS 3101.0 December 2008; ABS 3222.0 Sept 2008
[95] Media Release, Senator the Hon. Penny Wong, 17 March 2008
[96] Garnaut Climate Change Review, see http://www.garnautreview.org.au/domino/Web_Notes/-Garnaut/garnautweb.nsf
[97] Media Release, Senator the Hon Penny Wong, Minister for Climate Change and Water, 16 July 2008

electricity prices are estimated to increase 18 per cent assuming an emissions target of 5 per cent below 2000 levels by 2020.[98]

Consistent with the AER's preference to use the latest available economic information,[99] ActewAGL Distribution considers it necessary and appropriate to update the energy consumption forecasts to take account of this significant development.

Based on the information released in December 2008, ActewAGL has included a cost of $23 per MWh for carbon trading, rising by 5 per cent each year as the price cap in the scheme rises. This cost adds 18 per cent to the cost of energy for residential customers and 17 per cent to the cost for commercial customers.

The impact of these price changes on the energy forecasts depends on the price elasticity of demand. The model used for ActewAGL Distribution's original proposal incorporated price elasticity estimates from the National Institute of Economic and Industry Research (NIEIR). For the residential sector the estimated price elasticity of electricity demand was - 0.25 and for the commercial sector the estimated price elasticity of electricity demand was - 0.35.

Applying these price elasticities, the 18 per cent price increase for residential consumers and 17 per cent price increase for commercial consumers in 2010/11 have a significant impact on energy consumption, as expected, reducing it by 122 GWh, or 4.2 per cent.

These figures represent the demand impact of the CPRS-related electricity price increase *holding all else constant, including the prices of substitute goods.* It is important to account for the fact that the prices of alternative energy sources, particularly natural gas, will also be rising significantly under the CPRS. As a result, substitution away from electricity into gas will be less pronounced than in the case where only electricity prices rise. The demand impact of the CPRS will be the sum of two opposing effects:

1. the demand decrease resulting from the own-price increase (movement along the demand curve); and
2. the demand increase resulting from the cross-price increase for a substitute good (shift in the demand curve).

ActewAGL Distribution also notes that the price elasticity estimates in the original model are point estimates, which are appropriate for analysing small incremental price changes. Analyses of larger price increases, such as the predicted 20 per cent CPRS-related retail price increase in 2010, are very sensitive to specification of the demand function, which is more uncertain where forecast prices are outside the range of price levels experienced in the past.

In light of these considerations, ActewAGL Distribution has amended the price elasticities of demand in the model to - 0.2. Under this assumption, the estimated impact of the CPRS is to reduce electricity consumption in 2010 by 85 GWh, or 2.9 per cent.

[98] Australian Government 2008, *Carbon Pollution Reduction Scheme*, December, p 172
[99] AER *Draft Decision*, Appendix G

ActewAGL Distribution notes that this forecast impact of the CPRS is consistent with the forecasts prepared for the Commonwealth Treasury by consultants McLennan Magasanik Associates (MMA). MMA forecast a 12 per cent reduction in electricity consumption in 2020 under the CPRS-5 option (which is the scenario assumed in ActewAGL Distribution's forecasts).[100] Projecting ActewAGL Distribution's energy forecasts for the 2009-14 regulatory period out to 2020, the reduction due to the CPRS calculated by ActewAGL Distribution is also approximately 12 per cent.

3.5 Implications for demand forecasts

While the AER has accepted ActewAGL Distribution's demand forecasts in the draft decision, ActewAGL Distribution has reviewed the forecasts in light of the significant revisions to economic growth forecasts and CPRS implications outlined above.

The revised system demand in 2013/14 is 5 per cent lower in summer and 6 per cent lower in winter when compared with the original forecast. This reflects the impact of the downward revision of the economic growth forecasts for the ACT, together with the impact of higher prices resulting from the CPRS.

While demand at the system level is forecast to grow at a slower rate in the next three years, demand growth at certain zone substations will continue to be strong. This is a result of large government and defence infrastructure expenditures, and large private developments in City, Parkes, Russell and Harman, as well as residential development in Molonglo District.

ActewAGL Distribution has also assessed the implications of the revised demand forecast for the capital expenditure program. The combination of the effects from the economic slowdown, introduction of CPRS and localised large scale developments has led to slightly slower demand growth in Civic, Fyshwick and Woden zone substations. As a result of this, Eastlake, Civic and Molonglo zone substation projects and associated feeder augmentation work have been deferred by 12 months in accordance with the revised demand forecast. This has an impact on the size of ActewAGL Distribution's capital expenditure program, as shown in Table 2.11 in section 2.9.

3.6 Summary – revisions to the energy and demand forecasts

ActewAGL Distribution's revised energy forecast is shown in Table 3.2. The revised total forecast energy consumption over the 2009-14 regulatory period is 2.0 per cent lower than the original forecast. The forecast average annual growth rate over the 2009-14 regulatory period is 0.23 per cent, compared with 1.58 per cent in the original proposal. The reduction in forecast growth in energy consumption is driven by significant expected increases in retail electricity prices as well as lower economic growth forecasts.

[100] McLennan Magasanik Associates Report to Treasury, 11 December 2008, *Impacts of the Carbon Pollution Reduction Scheme on Australia's Electricity Markets,* table 3.2

Table 3.2 –Revised energy forecasts

MWh	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Electricity consumption	2,901,005	2,935,965	2,878,896	2,900,156	2,919,789	2,933,886

ActewAGL Distribution's revised system demand forecasts are shown in Table 3.3. Shaded cells show the peak (summer or winter) for each scenario. The revised forecast average annual growth rate for system summer maximum demand is 1.0 per cent, compared with 1.9 per cent in the original proposal.

Table 3.3 – Revised ACT system demand forecast

MVA	Summer			Winter		
Year	POE90	POE50	POE10	POE90	POE50	POE10
2008/09	572	622	676	**657**	**676**	**688**
2009/10	576	626	681	**658**	**677**	689
2010/11	568	618	**672**	**640**	**658**	670
2011/12	579	629	**684**	**641**	**659**	671
2012/13	589	641	**697**	**642**	**660**	672
2013/14	601	653	**710**	**643**	**661**	672

Table 3.4 and Table 3.5 contain ActewAGL Distribution's revised forecasts for the maximum demand at each zone substation for summer and winter respectively. Figures are PoE10, base case forecasts, with shaded cells indicating which season (summer or winter) is the peak for that zone.

Table 3.4 – Revised zone substation summer maximum demand forecast 2008-2014

MVA	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Belconnen	**60**	**59**	**57**	**57**	**57**	**58**
City East	**89**	**88**	**86**	**87**	**88**	**90**
Civic	**62**	**63**	**63**	**64**	**67***	**69**
Eastlake	**0**	**0**	**0**	**1**	**8**	**17**
Fyshwick	**39**	**41**	**43**	**45**	**47***	**45**
Gilmore	18	19	19	19	20	21
Gold Creek	33	35	37	40	43	46
Latham	51	51	49	49	49	50
Molonglo	**0**	**0**	**0**	**0**	**0**	**2**
Telopea Park	**98**	**97**	**94**	**93**	**91**	**90**
Theodore	24	24	23	24	24	24
Wanniassa	73	73	71	71	72	74
Woden	84	85	84	88	90	93†

* Exceeding zone substation emergency capacity

† Would exceed zone substation emergency capacity if Molonglo Zone Substation is not commissioned in time

Table 3.5 – Revised zone substation winter maximum demand forecast 2008-2014

MVA	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Belconnen	57	56	53	52	51	51
City East	76	75	73	73	73	73
Civic	57	59	58	59	61	63
Eastlake	0	0	0	1	8	16
Fyshwick	37	39	41	43	44	42
Gilmore	**26**	**26**	**25**	**25**	**25**	**26**
Gold Creek	**40**	**43**	**44**	**46**	**48**	**51**
Latham	**75**	**74**	**71**	**70**	**69**	**68**
Molonglo	0	0	0	0	0	2
Telopea Park	95	95	91	90	87	85
Theodore	**32**	**32**	**30**	**30**	**29**	**29**
Wanniassa	**93**	**91**	**87**	**85**	**84**	**85**
Woden	**87**	**88**	**86**	**88**	**89**	**91**

4. Revised cost of capital

4.1 Averaging period

In response to recent and unprecedented changes in global financial markets, most notably since September 2008, ActewAGL Distribution provides a revised proposal relating to the averaging period necessary for the calculation of the risk free rate and debt margin, given these new and unforseen circumstances. Details of the important considerations relating to this proposed variation to ActewAGL Distribution's previous proposal to the AER are provided in confidential attachment 10.

4.2 Debt margin

The debt margin is the margin above the nominal risk free rate that investors in a benchmark efficient DNSP are likely to demand as a result of issuing debt to fund business operations. The debt margin will vary with the business' credit rating. The transitional *Rules* state that the debt margin is:

> …the margin between the 10 year Commonwealth annualised bond rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity of 10 years and a credit rating of BBB+ from Standard and Poors.

4.2.1 ActewAGL Distribution regulatory proposal

In estimating the debt margin ActewAGL Distribution proposed to use data sourced from Bloomberg's 10-year BBB fair-yield index. However, since Bloomberg's 10-year BBB fair-yield index was discontinued in October 2007, ActewAGL Distribution proposed to use the higher value of:

- the 10-year CBASpectrum BBB+ predicted yield; and
- the 8-year Bloomberg BBB predicted yield plus the spread between an 8- and 10-year A rated Bloomberg predicted yields.

Either approach will lead to a conservative estimation of the debt margin because:

- CBASpectrum data has consistently underestimated the 10 year Bloomberg BBB fair yield; and
- adding the spread of an 8- and 10-year A rated index to the 8-year BBB predicted yield will ultimately underestimate the debt margin since it is more risky holding a less favourably rated bond over a longer time.

4.2.2 AER draft decision

The AER's draft decision has not accepted the use of CBASpectrum data to estimate the required margin between the 10-year Commonwealth Government Security (CGS) yield and observed Australian benchmark corporate bond yields corresponding to a BBB+ credit rating and a maturity of 10 years as required by clause 6.5.2(e) of the transitional *Rules*.

The AER's draft decision prescribes a single methodology for calculating the debt margin. The AER derives a proxy 10-year BBB+ corporate bond yield by adding the Bloomberg fair yield spread between A rated 8 and 10-year corporate bonds to the Bloomberg fair yield for BBB rated 8-year corporate bonds.

The AER's justification for adopting this approach is predicated on the following two arguments:

- Bloomberg BBB+ rated, long-term fair yields are more consistent with the observed yields of similarly rated actual bonds than CBASpectrum;[101] and
- since the a Bloomberg 10-year BBB fair yield index was discontinued, the best closest proxy is the Bloomberg fair yield for BBB rated 8-year corporate bonds plus the Bloomberg fair yield spread between A rated 8 and 10-year corporate bonds.[102]

4.2.3 ActewAGL Distribution response

The AER has adopted a methodology that, in the past, was likely to be reasonable on the basis that:

- NERA has demonstrated that CBASpectrum's estimation technique would likely bias down the estimate of fair value for BBB+ long maturity bonds; and
- the values provided by each data service were not significantly different (seldom exceeding 0.5 per cent).

However, the fact that CBASpectrum is now estimating 1.55 per cent *higher* yields on BBB+ bonds than Bloomberg is reporting on BBB bonds suggests that determining a second-best estimate of the yield on BBB+ bonds is more problematic than it has been in the past.

In January 2008 Allen Consulting Group (ACG) undertook an analysis for the Victorian Essential Services Commission during the Envestra gas access arrangement review. Consistent with its 2007 methodology, ACG obtained yields for corporate bonds with a maturity of greater than 5 years and a rating of BBB+ that could be used to determine the accuracy of the CBASpectrum and Bloomberg predictions. The relevant conclusion was that

[101] AER 2007, *Powerlink Queensland: Draft Decision*, 14 June; and AER 2006, *Directlink Joint Venturers' application for conversion and revenue cap*, Decision, 3 March
[102] AER 2008, *SP AusNet transmission determination 2008-09 to 2013-14: Final Determination*, January, pp 95-98

ACG believed "that CBA Spectrum has performed better in predicting bond yields than Bloomberg under current market conditions".[103]

ActewAGL Distribution's position is also supported by a new report "*Debt and Equity Raising Costs*" prepared by CEG which forms confidential attachment 15 to this revised proposal.

Based on the new analyses undertaken by CEG and ACG, CBASpectrum BBB+ fair value is likely to provide a more accurate estimate of true 'fair value' as would be derived from the AER's standard methodology relying solely on Bloomberg.[104] ActewAGL Distribution therefore proposes that the AER change its position on the use of CBASpectrum.

4.3 Expected inflation

For the purposes of providing an expected inflation rate for inclusion in the nominal weighted average cost of capital, ActewAGL Distribution proposes a geometric average of the annual inflation rate over the 10-year period from June 2009 to June 2019.[105] This average is calculated using the forecasts provided in Table 4.1.

Table 4.1 – Calculation of average inflation rate

Financial year ending June	2010	2011	2012	2013	2014	2015 to 2019 inclusive	Average
Forecast Inflation (%)	3.0	2.5	2.6	2.6	2.5	2.5	2.57

ActewAGL Distribution's response to the AER's draft decision inflation forecasts are provided in section 2.2.3.

[103] ACG, *Memorandum to ESCV – Gas Access Arrangement Review 2008: updating estimates of debt margins for 20 trading days to November 2007 and December 2007*, 25 January 2008

[104] ActewAGL Distribution notes that a third-best approach to relying solely on one or the other of these data services would be to take a simple average of the two. This would be consistent with the AER's approach to estimating future prices for raw materials (copper, aluminium, crude oil etc) for the purpose of estimating future capital expenditure costs.

[105] To determine an average annual growth rate, a geometric average is considered more accurate than the approach applied by the AER.

5. Self insurance

5.1 ActewAGL Distribution regulatory proposal

ActewAGL Distribution's original regulatory proposal incorporated allowances totalling $1.5m (2007/08 dollars) per annum for seven defined categories of self insured risk. [106] These allowances account for the expected cost of specified risks not elsewhere included in ActewAGL Distribution's regulatory proposal, that is, in the cost of capital, via external insurance, as part of an operating or capital expenditure program, or included in a proposed pass through event.

The recovery of expected costs of this type is integral to achieving "efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to … price, quality, safety, reliability and security of supply of electricity" as required by the *NEL Objective*[107]. It is also central to ensuring consistency with the *NEL* revenue and pricing principle that regulated network service providers are "provided with a reasonable opportunity to recover at least the efficient costs the operator incurs"[108] and that "a price or charge for the provision of a direct control network service should allow for a return commensurate with the regulatory and commercial risks involved in providing the direct control network service to which that price or charge relates".[109]

Self insurance premiums for each applicable risk were calculated for ActewAGL Distribution by consultants SAHA International (SAHA) based on examination of the specific circumstances of ActewAGL Distribution's assets, including the relevance of other risk mitigation strategies mentioned above approved by qualified actuaries. The resulting values of the proposed self insurance premiums are shown in Table 5.1.

[106] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, pp 193-4
[107] *National Electricity Law*, section 7—National electricity objective
[108] *National Electricity Law*, section 7A—Revenue and pricing principles, sub-section (2)
[109] *National Electricity Law*, section 7A—Revenue and pricing principles, sub-section (5)

Table 5.1 – Quantification of ActewAGL Distribution's self insured risk premiums

$ '000 (2007/08)	Annual value	Five-year value
Bushfire	178.0	890.0
Earthquake	10.3	51.5
Theft of assets	14.0	70.0
Key asset failure	280.0	1,400.0
Poles and wires	1,049.0	5,245.0
Counter-party credit	14.5	72.5
General public liability	1.1	5.3
Total	1,546.9	7,734.3

In developing its self insurance proposal, ActewAGL Distribution considered the Australian Competition and Consumer Commission (ACCC) statement of regulatory principles for transmission businesses, adopted by the AER, which specifically canvasses inclusion of the cost of self insurance and other regulatory mechanisms to mitigate the risks on transmission businesses of the occurrence of particular events. The statement includes that:

> The ACCC considered the option of self insurance, in addition to external insurance, should generally be available to Transmission Network Service Providers (TNSPs) to allow them to select the most efficient approach. Alternatively, it is suggested that where a risk is not controllable by the TNSP, it may be appropriate to include (as an alternative to receiving an allowance in the cash flows) a mechanism in the revenue cap that allows the TNSP to pass through to users the costs of certain events.[110]

The AER's guidance to transmission businesses in January 2007 specifically allowed for the inclusion of a self insurance premium as long as relevant conditions, for example, actuarial assessment, were met. Consistent with this, the AER in its recent electricity transmission decision for SP AusNet allowed the inclusion of a self insurance risk premium, stating:

> For risks associated with the provision of prescribed transmission services that are not compensated for through the WACC or elsewhere in its revenue proposal, a TNSP may propose to "self-insure", and seek a self insurance allowance for this purpose. [111]

ActewAGL Distribution submitted that the principles applying to transmission businesses in respect of self insurance apply equally to distribution businesses.

[110] ACCC 2004, *Statement of principles for the regulation of electricity transmission revenues—Background paper*, 8 December, p 65
[111] AER 2008, *Final decision, SP AusNet transmission determination 2008-09 to 2013-14,* January, p 137

5.2 AER draft decision

The AER's draft decision states that the AER assessed ActewAGL Distribution's proposed self insurance premiums against the operating expenditure objectives and criteria in clause 6.5.6 of the transitional *Rules*. [112] This involved an assessment of the proposed allowances to determine whether they "reasonably reflect the efficient costs that a prudent operator in the circumstances of ActewAGL Distribution would require to achieve the operating expenditure objectives, as required by clause 6.5.6(c)".[113] The AER further explains its approach, stating that it had:

> … assessed the efficiency and prudence of the proposed self insurance allowance by considering whether the probability of an event occurring and the costs associated with the event (and therefore the associated insurance premium) have been reasonably determined. [114]

Having reviewed the analysis undertaken by SAHA for ActewAGL Distribution, the AER accepted:

- that ActewAGL Distribution's proposed allowances for self insurance for theft of assets risk and counterparty credit risk reasonably reflect the costs that a prudent operator in the circumstances of ActewAGL Distribution would require to achieve the specified operating expenditure objectives;
- the proposed self insurance premium for the risk of defined very minor bushfires ignited by ActewAGL Distribution assets;
- the proposed self insurance premium for the risk of consequential damage to third party assets resulting from failure of key assets; and
- the proposed self insurance premium for the risk of costs associated with the failure of key assets.

The AER, however, rejected:

- the proposed self insurance premium for the risk of earthquakes of greater than magnitude 5 on the Richter Scale on the basis that the probability of occurrence has not been reasonably determined;
- the proposed self insurance premium for the risk of minor bushfires ignited by ActewAGL Distribution assets on the basis that the estimate of the probability of occurrence proposed by ActewAGL Distribution was considered not sufficiently robust;

[112] AER *Draft Decision*, pp 108-17
[113] AER *Draft Decision*, p 109
[114] AER *Draft Decision*, p 109

- the proposed self insurance premium for the risk of major bushfires ignited by ActewAGL Distribution assets on the basis that the probability of occurrence had not been reasonably determined;
- the proposed self insurance premium for the risk of minor bushfires ignited by third parties on the basis that the estimate of probability of occurrence and associated cost were not sufficiently robust to be used to determine a self insurance allowance and, in particular, that estimates of the function relationship between damage costs and areas burnt proposed by the Centre for International Economics (CIE) showed insufficient explanatory power and were inaccurately used by SAHA;
- the proposed self insurance premium for the risk of major bushfires ignited by third parties on the basis that probabilities of occurrence had not been reasonably determined, and in particular that the assumed probability of a third party starting a bushfire impacting on ActewAGL Distribution's assets of 1 in 100 years has not been substantiated;
- the proposed self insurance premium for the risk of damage to key assets attributable to storm-type natural disaster on the basis that a media statement relied on by SAHA to substantiate a 1 in 30 year storm does not constitute a robust assessment of the probability of a catastrophic storm impacting the ACT;
- the proposed self insurance premium for the risk of unrecoverable third party damage to key assets on the basis that the claims history provided to SAHA on which it calculated the self insurance premium was too short to provide a robust indication of historical claims and that the baseline operating expenditure for the next regulatory control period to accommodate these events, based on previous experience with these events, is substantially below the self insurance amount proposed by ActewAGL Distribution;
- the proposed self insurance premium for the risk of consequential damage/liability to a third party's property as the result of failure of power transformers and circuit breakers on the basis that the probability of occurrence had not been reasonably determined; and
- the proposed self insurance premium for general public liability risk for claims above the existing external insurance deductable on the basis that the calculation of probability was insufficiently robust.

These positions and impacts on ActewAGL Distribution's proposed self insurance allowances are summarised in Table 5.2.

Table 5.2 – AER draft decision on ActewAGL Distribution self insurance proposal

Quantified risk	ActewAGL proposed self insurance premium (5 years) ($08/09)	Risks accepted in AER draft decision	Risks rejected in AER draft decision	AER draft decision self insurance premium (5 years) ($2008/09)
Theft of assets	$71,890	All	None	$71,890
Earthquake	$52,891	None	All	-
Counterparty credit	$74,458	All	None	$74,458
General public liability	$5,392	None	All	-
Bushfire	$914,030	Risk arising from ActewAGL assets igniting a very minor bushfire	Risks arising from: • ActewAGL assets igniting a minor bushfire • ActewAGL assets igniting a major bushfire • damage to ActewAGL assets from a minor bushfire ignited by 3rd party • damage to ActewAGL assets from a major bushfire ignited by 3rd party	$51,350
Poles and lines	$5,386,615	Risk of consequential 3rd party damage leading to claims	Risks of • damage from severe storm • damage from catastrophic storm • unrecoverable 3rd party impact	$179,725
Key asset failure	$1,437,800	Residual risk of failure	Consequential 3rd party damage	$1,430,000
Total	$7,934,075			$1,807,423

Note: ActewAGL Distribution's self insurance proposals were originally expressed in 2007/08 dollars and inflated in the draft decision to 2008/09 dollars using an assumed CPI of 2.7% to match the remainder of the proposal.

In a related consideration, the AER's discussion of cost pass throughs in the draft decision revealed that, in deciding whether or not to include an pass through event proposed by ActewAGL Distribution as a nominated event, the AER will consider (among other factors) whether "the event is not already insured for (either external or self insured)" and whether

"the event cannot be self insured because a self insurance premium cannot be calculated or the potential loss to ActewAGL is catastrophic".[115]

5.3 ActewAGL Distribution response

5.3.1 General comment on the AER's draft decision approach to self insurance

ActewAGL Distribution notes that the transitional *Rules* require a DNSP to be provided with an opportunity to recover all efficient costs it could reasonably expect to face during the regulatory period. Distribution businesses typically face the prospect of a number of risks which, while infrequent, have a substantial impact, are uninsurable, or are not suitable for pass through (either because individual events are under relevant materiality thresholds, or because they are susceptible to moral hazard).

Before addressing the specific issues with regard to self insurance premiums raised by the AER in the draft decision, ActewAGL Distribution observes the following in regard to the approach taken by the AER.

- the AER has taken a view in assessing whether the proposed self insurance premiums reasonably reflect the efficient costs that a prudent operator would face apparently without reference to relevant industry practice. As mentioned in the section above, the ACCC's statement of regulatory principles for transmission businesses adopted by the AER requires the sign-off of a qualified actuary for claims of self insurance premiums. In view of this regulatory precedent, ActewAGL Distribution believes therefore that a superior interpretation of reasonableness would be one that recognises consistency of the proposal with the principles and methods adopted by reasonable practitioner, that is, an actuary, risk manager or insurance assessor;

- In no case where a self insurance premium proposed by ActewAGL Distribution was rejected did the AER propose, as required by the transitional *Rules*[116], an alternative value for the self insurance premium or an alternative means of mitigating the risk. In these cases, the AER, in not refuting that each has a non-zero probability and impact, has effectively valued the risk exposure at zero. In no case has the AER sought to justify a valuation of zero;

- A pattern is apparent in the AER's draft decision conclusions for both ActewAGL Distribution and the NSW distributors of rejecting risk valuations, and not substituting an alternative value in cases where premiums have been calculated for events:
    - to which the distributor has not to date been subject;
    - with reference to data from another distributor;
    - with reference to an imperfect data set; or
    - where calculation of the self insurance premium relied on qualitative assessment.

[115] AER *Draft Decision*, p 167
[116] Transitional *Rules* clause 6.12.1(4)

With regard to the final main point above, none of the methods described are inconsistent with the principles of actuarial or risk management practice and SAHA has advised ActewAGL Distribution that each is commonly used in risk reporting and the calculation of premiums in the insurance market. As such, each should be considered, when used in accordance with established actuarial processes, to provide results that reasonably reflect the efficient costs of a prudent operator. A corollary of the AER's position, applied generally, would be that risk managers within firms would ignore the possibility of events beyond their company's experience or that insurance companies would not offer insurance for categories of events that are yet to occur. Clearly neither of these reflects reality.

SAHA followed the principles of actuarial practice in deriving the estimates of ActewAGL Distribution's proposed self insurance premiums and the assessments made were reviewed and approved by a qualified actuary.[117] Data used was the best available and where necessary, adjusted to take account of reasonable qualitative knowledge. The AER should note that such adjustment is accepted and encouraged by the principles under which actuaries act and in the Australian Standard applying to risk management.[118] It should also be noted that samples derived using imperfect data remain an unbiased estimate of the actual value, exhibiting only potentially greater variance around the true mean.

5.3.2 Specific self insurance issues raised by the AER draft decision

In addition to the principles discussed above on which the AER addressed the question of reasonableness of self insurance estimates, the draft decision raised several issues in relation to specific methodological issues.

In several cases, ActewAGL Distribution, with the NSW DNSPs and TransGrid, has sought further advice of SAHA regarding its precise methods and intentions in relation to issues highlighted by the AER in the draft report. The resulting report from SAHA, *Response to the AER's Draft Decision – Self Insurance,* forms confidential attachment 16 to this revised proposal. SAHA's advice on the AER draft decision treatment of individual risks for which self insurance was proposed are summarised below.

Where, as in most cases, ActewAGL Distribution has maintained its original claims for self insurance premiums in this revised proposal, it has done so on the basis of considered reasonableness of its claims with regard to the professional and unbiased advice it has received. The AER's draft decision in these cases has provided ActewAGL Distribution with no relevant alternative proposals and it is certain that a zero allowance for risks where ActewAGL Distribution's proposal has been rejected does not represent an efficient estimate of the expected costs of the events to ActewAGL Distribution.

[117] The sign off of the qualified auditor to the SAHA report accompanying the original proposal forms confidential attachment 16A to this revised proposal.
[118] SAHA, *Response to the AER's Draft Decision – Self Insurance*, p 15 – Attachment 16 to this revised proposal, cites relevant provisions of *AS 4360 – Risk Management* which states that "qualitative analysis may be used: as an initial screening activity to identify risks which require more detailed analysis; where this kind of analysis is appropriate for decisions; or where the numerical data or resources are inadequate for a quantitative analysis".

Earthquake risk

The AER draft decision excluded costs in relation to ActewAGL Distribution's claim for self insurance costs in relation to the risk of earthquakes above magnitude 5.

As observed in the previous section, the AER's draft decision has, in general, excluded compensation for self insurance risks not supported by historical data. As stated, ActewAGL Distribution believes that such an approach is inconsistent with good risk management practices, namely that the fact that an event has not occurred in the past does not preclude its future occurrence.

In the case of severe earthquakes, the risk is a function of geology—outside human control—and is supported by extremely long datasets. According to SAHA, the data suggest that such an event has not occurred in the past 166 years. While an earthquake could conceptually occur, ActewAGL Distribution accepts, on SAHA's advice, that there is merit in the argument that the extremely low observed probability of such an event does not necessarily support the adoption of a reasonable estimate of efficient cost associated with bearing the risk. In such cases, a cost pass through may provide a preferable mechanism and therefore be acceptable to ActewAGL Distribution as an alternative to its proposed self insurance premium of $51,500 (2007/08 dollars) over the five year regulatory period.

ActewAGL Distribution has therefore revised its forecast self insurance costs to remove the proposed allowance for earthquakes greater than magnitude 5 on the Richter Scale. In parallel, ActewAGL Distribution has revised its proposed definition of a *major natural disaster* pass through event to include earthquakes of this scale, as discussed in section 7.1.3 of this revised proposal.

Bushfire Risk

In its original proposal, consistent with SAHA advice, ActewAGL Distribution presented its proposals for self insurance relating to bushfire risk as comprising, major, minor and very minor fires, each in relation to the consequences of ignition by ActewAGL Distribution's assets causing damage to third party property and in relation to fires ignited by other sources impacting on ActewAGL Distribution assets.

Fires ignited by ActewAGL Distribution assets

The AER's draft decision accepted the self insurance premium in relation to risks arising from **very minor fires** ignited by ActewAGL Distribution assets.

ActewAGL Distribution has a current exposure to **minor bushfires** above its current $500,000 deductible limit for third party liabilities. To calculate the probability of occurrence, SAHA proposed the measure of the length of ActewAGL Distribution lines in relation to NSW/ACT as a whole to provide an indication of the area of coverage. Lines are relevant since they are the usual cause of electricity asset ignited fires. As stated in the original proposal, ActewAGL Distribution lines represent approximately 1.22 per cent of total NSW/ACT lines. This proportion was multiplied by the average 17 fires started annually by

electricity assets in NSW[119] to provide an estimated probability of one minor fire every 5 years for ActewAGL Distribution.

ActewAGL Distribution considers this a reasonable basis for an estimate of the probability of such an event given no previous recorded occurrences in the ACT.

ActewAGL Distribution also maintains its original proposal for the self insurance premium in relation to a **major bushfire** ignited by its assets of $4,800 (2007/08 dollars) per annum. This claim was based on an estimated probability of such an event of 1 in 300 years. The AER was of the opinion that "there is no reason to believe that a 1 in 300 year probability is any more reasonable than a 1 in 100 year or a 1 in 500 year probability" and rejected the associated self insurance premium on the basis that the probability of occurrence had not been correctly determined.[120]

ActewAGL Distribution maintains, on the advice of SAHA, that the proposed 1 in 300 probability is consistent with the probabilities derived for the NSW DNSPs and TransGrid, given that these service providers are more likely to start a bushfire given the relative size of their assets. Further, a 1 in 300 year probability is a more reasonable assumption and produces an outcome more likely to reasonably reflect the efficient costs that a prudent operator in ActewAGL Distribution's situation is likely to incur over the next regulatory period than the AER's effective substituted probability of zero. Though ActewAGL Distribution assets may never have started a bushfire, it is clear that electricity distribution assets in fire prone areas are capable of starting fires with significant consequences and that a zero self insurance estimation will understate this risk.

With regard to the quantification of this scenario, SAHA has been able to clarify,[121] that the report of the Centre for International Economics (CIE), used in another context and discussed further below, was not used by SAHA to determine ActewAGL Distribution's consequence exposure. Instead, actual costs incurred by ActewAGL Distribution as a result of the 2003 Canberra bushfire were used. While this fire was not ignited by ActewAGL Distribution assets, SAHA considers that it provides a reasonable representation of the costs of a major bushfire in the ACT.

Fires ignited by third parties with effect on ActewAGL Distribution

ActewAGL Distribution did not propose a self insurance premium for the expected costs of **very minor bushfires**.

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[119] With regard to this statistic, the AER's draft decision questions the use of 2002/03 data by SAHA given that this was one of the worst bushfire seasons on record. SAHA points out (p 39 of the SAHA report at attachment 16 of this revised proposal) that it did not base calculations on the raw number of fires from this year but only on the proportions of those ignited by electrical/power lines (5.2%), and those by third parties (94.8%) as this was the best available information. SAHA then applied the 5.2% to the historical record of bushfire events in NSW, yielding 17 (0.052 x 330) bushfires per annum. SAHA considers that the percentage of bushfires ignited by different sources is not likely to change significantly from year to year.

[120] AER, *Draft Decision*, p 111

[121] SAHA, *Response to the AER's Draft Decision – Self Insurance*, p 38 – Attachment 15 to this revised proposal

SAHA calculated the probability of ActewAGL Distribution being impacted by a **minor bushfire** from ActewAGL Distribution historical data. The AER in its draft decision indicated that it was unclear about the inception date of ActewAGL Distribution used as a basis for probability calculations and, in addition, noted the lack of inherent significance in the inception date of ActewAGL Distribution.[122]

The relevant ActewAGL Distribution dataset records four occurrences of this type of event in eleven years that consistent data is available.[123] This equates to 4 incidents in 11 years or 0.36 incidents per year. SAHA has clarified that the use of the term "inception date" in its probability discussions was misleading, and related only to the period for which meaningful data became available for the business. This should have been expressed in ActewAGL Distribution's case as "the period of assessment where data was recorded and available was from 1997 to 2008".

For a risk of damage to ActewAGL Distribution from a **third party igniting a major bushfire**, the AER rejected ActewAGL Distribution's self insurance proposal noting that no evidence had been provided to substantiate the proposed probability of 1 in 100 years.

From the data available from NSW/ACT DNSPs and the Emergency Management Australia (EMA) database available to SAHA, there is a single known case of such an event significantly impacting on electricity assets — the Canberra bushfires of 2003.

As well as other substantial damage, the 2003 Canberra bushfire impacted significantly on ActewAGL Distribution's assets, specifically:

- Power poles: 929 destroyed distribution poles cost $7,500 each to replace and 21 transmission poles, $18,000 each – a total cost of pole replacement of $7,345,500; and
- Distribution transformers: 775 destroyed at a cost of $10,000 each – a total cost of distribution transformer replacement of $7,750,000.

The Canberra bushfires therefore had a $15 million impact on ActewAGL Distribution's assets.

ActewAGL Distribution considers it reasonable to assume that an event of such significance as this would occur only once in one hundred years, as recommended by SAHA. It is clear from SAHA's subsequent analysis of the EMA data that no fire with significant effect on electricity infrastructure has occurred since electricity distribution infrastructure became ubiquitous from about 1940.

The AER draft decision was also critical of SAHA's use of a report by the CIE, ostensibly as the basis for establishing a functional relationship between damage costs and area burnt.

[122] AER, *Draft Decision*, p 111
[123] This is a period corresponding to the instigation of ActewAGL's direct predecessor organisation, ACTEW Corporation, as a territory owned corporation in 1997.

SAHA has been able to clarify[124] that, contrary to the AER's understanding, the CIE report was used by SAHA to form a view on the average area burnt out in major and minor bushfires. SAHA did not use the costs identified in the CIE report, but rather each business' asset data to determine the average self insured asset value per hectare multiplied by the CIE value for burnt out area to establish the cost impact.

It could be argued that, similar to the case with major earthquakes, a cost pass through may provide a preferable mechanism for the mitigation of the risk firestorms of the type experienced in Canberra in 2003. An extension of the major natural disaster pass through event provision to apply to such events would therefore be acceptable to ActewAGL Distribution as an alternative to its proposed self insurance premium of $47,725 (2007/08 dollars) over the five year regulatory period over the AER's draft decision provision of zero.

ActewAGL Distribution's proposed self insurance allowance has therefore been revised to remove this component. This revision is proposed on the assumption that ActewAGL Distribution's proposed revisions to the *major natural disaster* pass through event definition discussed in section 7.1.3 of this revised proposal are accepted by the AER.

Poles and lines

In its original proposal, consistent with SAHA advice, ActewAGL Distribution presented its proposals for self insurance relating to risk of damage to poles and lines as the result of a severe storm, a catastrophic storm, consequential third party damage leading to claims, and unrecoverable third party damage. The AER draft decision accepted in full the self insurance proposal for **consequential third party damage leading to claims**, but rejected ActewAGL Distribution's proposals (and again proposed no alternative mitigation) for each of the other risks.

It is noted that the AER draft decision did not provide an explanation for its rejection of the estimated annualised cost of **severe storms** incurred by ActewAGL Distribution. This information was derived from data recorded by ActewAGL Distribution spanning five financial years from 2002/03 to 2006/07. ActewAGL Distribution maintains its original self insurance allowance for severe storms.

In rejecting ActewAGL Distribution's self insured risk premium related to the risk of **a catastrophic storm** impacting upon the businesses poles and wires, the AER stated that it:

> … considers that the media statement relied upon by SAHA does not constitute a robust assessment of the probability of a catastrophic storm impacting ActewAGL's network and therefore does not accept the adoption of a 1 in 30 year probability of such an event.

SAHA remains of the view that a 1 in 30 year probability for a catastrophic storm reasonably reflects the efficient costs that a prudent operator would incur. In support, SAHA notes that there are numerous examples of incidents listed in the EMA database for NSW in the past 20

[124] SAHA, *Response to the AER's Draft Decision – Self Insurance*, p 33 – Attachment xx to this revised proposal

years alone.[125] In addition, the impact of storms is not confined to NSW. Clearly, given the location of the ACT within NSW, similar weather patterns are likely to affect the ACT. As well, the EMA database lists numerous storms that have affected the ACT region in the last 20 years, which are discussed further in the SAHA report.

SAHA notes that whilst it is difficult to assess the specific damage caused by these storms to powerlines — this is not quantified in the EMA database, and was not able to be provided by ActewAGL Distribution — it appears that in all likelihood, many of them would be classified as catastrophic storms.

An analysis of 4 such storms in the ACT and NSW listed in the ENA database equates to one incident every 5 years, which, given that there are four businesses covering NSW and the ACT region, equates to an *unweighted* probability of occurrence for each business of 1 in 20 years. However, as SAHA has implicitly done in its original analysis, this probability should be further weighted between the different regions, and in particular, the probability should have regard for the fact that historically, events tend to have been more focused on the Sydney/Newcastle area serviced by EnergyAustralia.

SAHA advises that, overall, the adoption of a 1 in 30 year probability of such an event for ActewAGL Distribution is consistent with a return period of one event every 5 years in NSW and the ACT.[126]

SAHA notes that it is virtually impossible to use the EMA database to derive the impact of large scale storms on electricity assets beyond around 20 years ago, as it appears that the data included within the database is much briefer, and less descriptive, beyond this period. As such, SAHA believes that there is a major risk in using the full dataset to derive the overall probability of a catastrophic storm impacting electricity assets, as incidents mentioned at a high level in the EMA database, say in 1970, may have not discussed in enough detail the impact that they have had on electricity assets, even if in actuality, these events did have a significant impact on those assets. Further to this, it is unclear whether this database has captured all relevant storms that have affected NSW. For example, the Bureau of Meteorology (BOM), in its *Summary of Significant Severe Thunderstorm Events in NSW - 1990/2000* includes a storm on 18 March 1990 that is said to have brought down nine kilometres of power lines.[127] Yet, despite featuring in the top 10 to15 storms of the 1990's on the BOM website, this is not included on the EMA database.

Overall, SAHA believes that the use of 20 years of historical data should not preclude this dataset being treated as a reasonable source of estimates of the probability of occurrence of such an event. In particular, SAHA believes that there is no reason to believe that such a dataset will significantly vary, either for the 20 years before SAHA's cut off period of 1988, or

[125] SAHA, *Response to the AER's Draft Decision – Self Insurance*, p 42 – Attachment xx to this revised proposal
[126] SAHA, *Response to the AER's Draft Decision – Self Insurance*, p 42 – Attachment xx to this revised proposal
[127] Bureau of Meteorology website, accessed 13 January 2009, see http://www.bom.gov.au/weather/nsw/sevwx/9000summ.shtml

for the forthcoming 20 years (except, potentially for climate change, which might increase the probability of such storms occurring), particularly as the probability of occurrence is primarily driven by exogenous weather events.

In addition to the above evidence, SAHA further notes that virtually every other incident that has occurred over the last 20 years that is listed in the EMA database mentions the large scale power outages and damage caused by the storms. However, again, it is difficult to gauge the exact magnitude of the damage based on the qualitative evidence provided in the database.

ActewAGL Distribution considers that its proposed self insurance allowance for catastrophic storms should be allowed by the AER as it relates to a quantifiable risk that has been reasonably determined. In the event that the AER rejects this proposed allowance, it is important to ensure that the *major natural disaster* pass through event definition includes these events as an approved pass through.

In relation to **unrecoverable third party damage** the AER "considers that the claims history provided by ActewAGL Distribution (April 2007 to March 2008) is too short to provide a robust indication of historical claims". [128]

As stated in previous sections, SAHA advises that the absence of a significantly long dataset is insufficient reason to exclude this risk quantification in its totality, particularly given that this risk is by its very nature, a high probability, low consequence event. A 12 month sample would be expected to adequately reflect the likely expected future cost of such events as effective as does a single base year in the case of other operating costs.

Key asset failure

AER has accepted ActewAGL Distribution's proposal for the **direct costs of incidents** that would be incurred as a result of the failure of a key asset failure (transformer or circuit breaker).

However, the AER rejected the self insurance allowance for **third party claims** on the basis that ActewAGL Distribution had never experienced such an event.

SAHA only calculated the above deductible aspect of this risk that is, lower probability, higher consequence events that might occur. In doing so, SAHA assumed that in the main, the smaller, more frequent events would be captured in a business base year operating expenditure forecasts.

SAHA believes that there is a real risk associated with the failure of key assets, for example:

- explosions of transformers that impact on third party property;
- failure to supply properties as a result of a failure of a key asset; and
- impact on end customer equipment as a result of key asset failure.

[128] AER *Draft Decision*, p 115

It is acknowledged that it is very difficult to quantify this risk, particularly given the likely low probability of occurrence. Notwithstanding this, SAHA still believes that its probability and consequence estimates are reasonable, and moreover, that they are more reasonable than the effective zero estimate included by the AER in its draft decision.

Alternatively, if the AER were to maintain its existing position in relation to this risk, then the AER should allow the businesses to adopt a cost pass through for this risk, in lieu of the inclusion of a self insurance risk allowance.

General Public Liability Risk

SAHA estimated a self insurance amount in relation to the above deductible component of any General Public Liability claim made against ActewAGL Distribution. Liabilities can include, among other things:

- bodily injury;
- property damage;
- economic loss; and
- failure to supply.

SAHA advises that this is a credible risk that could affect ActewAGL Distribution in the future and therefore should be included as a self insured risk premium. In saying this, SAHA notes (and noted in each of its original reports) that one distribution business, Integral Energy, has experienced two above deductible claims during the last regulatory period, thus illustrating that this is a real risk that can impact electricity businesses.

The AER stated, however, that:[129]

> Integral Energy's experience with above deductible claims is not relevant to ActewAGL, given the inherent differences between Integral Energy and ActewAGL's businesses and network environment.

SAHA advises that a necessary component of any risk management and risk quantification project is to analyse all available data both internal and external to the business. In relation to General Public Liability risk, it is unclear what inherent differences between Integral Energy and ActewAGL Distribution businesses and network environment would totally preclude the use of data from one business to another in this situation. The onus is on the AER to propose an alternative reasonable basis for estimating such risks, where it does not consider that the proposed estimations are reasonable.[130]

For ActewAGL Distribution, SAHA adopted a 1 in 24 year probability, based on the period from the creation of ACTEW Corporation (the direct predecessor of ActewAGL Distribution in the operation of ACT electricity distribution network) until the end of the 2009/14 regulatory

[129] AER *Draft Decision*, p 117
[130] Transitional *Rules* clause 6.12.1(4)

control period. This represents a discount on the Integral Energy probability, based on the evidence that ActewAGL Distribution (and ACTEW Corporation) have never recorded such an event and differences in relative network sizes.

5.4 Revised proposal

As outlined above, ActewAGL Distribution stands by its original proposal for compensation for the risks for which it self insures, based on SAHA's unbiased estimates, which have also been examined and approved by a qualified actuary.

ActewAGL Distribution considers that it is reasonable to provide compensation for self insurance premiums based on estimates derived from cost and incident sources that may not directly derive from the business in question, where there is not a perfect dataset, or where estimates are based on comparable experiences or where qualitative judgement is involved. A reasonable estimate of self insured premiums can, where required, be inferred with a reasonable degree of certainty in the hands of or under oversight of experienced practitioners. In many cases where an event has not yet occurred, but has a clear potential to occur in the future, such estimates are indeed necessary tools in ensuring effective risk mitigation, and are practised routinely by actuaries, insurers and risk managers.

ActewAGL Distribution notes, however, that the AER has indicated there may be scope for some events, particularly those where the event the frequency is very low or the effect is catastrophic, to be treated as pass through events. As a result, ActewAGL Distribution has revised its self insurance allowance to exclude costs proposed in its original proposal associated with:

- Earthquakes greater than magnitude 5 on the Richter Scale - $51,500 over the five year regulatory period; and
- Major bushfires ignited by a third party - $47,725 over the five year regulatory period.

ActewAGL Distribution considers that there is sufficient information available for reasonable estimates to be made in relation to other catastrophic, low frequency events, such as catastrophic storms and major bushfires ignited by ActewAGL Distribution's own assets. ActewAGL Distribution therefore maintains its original proposed self insurance allowance. In the event that the AER does not accept these proposed allowances, ActewAGL Distribution considers that the pass through events approved for ActewAGL Distribution should be amended to include these events. Similarly, should the AER not approve ActewAGL Distribution's proposed self insurance allowance for third party claims, this risk should be addressed through an appropriate pass through mechanism.

ActewAGL Distribution's revised proposal for self insurance is summarised in Table 2.8. It should be noted that the included amounts have been inflated to 2008/09 dollars, as per the methodology in the AER's draft decision, using the revised CPI measure of 3.75 per cent discussed in section 2.2 of this revised proposal.

6. Revised revenue requirement

Clause 6.12.1(2) of the transitional *Rules* states that a distribution determination is predicated on a decision regarding ActewAGL Distribution's building block proposal, in which the AER must either approve or refuse to approve the proposed annual revenue requirement for each regulatory year of the regulatory control period.

ActewAGL Distribution has amended the quantification of the standard control cost building blocks in the AER's draft decision to incorporate the following:

- an adjustment to the timing of the capital expenditure program to account for the revised demand forecasts;
- the addition of $3.7 million in capital expenditure and $0.9 million in operating expenditure to the original expenditure proposals for 2009-14 to meet the AER's requirements for STPIS reporting;
- the addition of $0.3 million in capital expenditure and $48.8 million in operating expenditure to the original expenditure proposal for 2009-14 to take account of the impact of the new ACT feed-in tariff scheme;
- the retention of the majority of its originally proposed self insurance allowance;
- a revised proposal for forecast debt and equity raising costs;
- a revised set of input cost escalators in response to the draft decision;
- a minor adjustment to account for a clerical mistake in ActewAGL Distribution's application of the AER's escalators to the expenditure forecasts relied upon by the AER in its draft decision;
- an updated estimation of the weighted average cost of capital (WACC) applying ActewAGL Distribution's proposed averaging period and preferred approach to the debt margin; and
- a minor adjustment to forecast asset disposals due to a clerical mistake in the AER's draft decision PTRM.

Under an average revenue cap constraint, the calculated X-factor will also be influenced by the revision to the annual energy forecast.

6.1 Regulatory depreciation

Table 6.1 provides the updated estimate of regulatory depreciation over the next regulatory period.

Table 6.1 – Regulatory depreciation updated estimate 2009-14

$ million (nominal)	2009/10	2010/11	2011//12	2012/13	2013/14
Regulatory Depreciation	14.5	16.2	17.9	19.5	21.3

6.2 Return on capital

ActewAGL Distribution's revised return on capital proposal has been calculated by applying the revised WACC to its opening Regulatory Asset Base (RAB) for each year of the regulatory control period.

The revised roll forward calculation is detailed in ActewAGL Distribution's revised Roll Forward Model (RFM) and PTRM, and summarised in Table 6.2. It reflects a revised opening RAB, as well as the disaggregation of forecast capital expenditure into multiple asset classes.

Table 6.2 – ActewAGL Distribution revised roll forward calculation

$ million (2008/09)	2009/10	2010/11	2011//12	2012/13	2013/14
Opening RAB	591.7	650.6	703.6	753.8	795.6
Net capital expenditure	73.4	69.2	68.1	61.3	59.9
Regulatory Depreciation	14.5	16.2	17.9	19.5	21.3
Closing RAB	650.6	703.6	753.8	795.6	834.1

ActewAGL Distribution's revised nominal vanilla WACC is 10.31 per cent. The return on capital building block is provided in Table 6.3.

Table 6.3 – ActewAGL Distribution revised return on capital building block

$ million (nominal)	2009/10	2010/11	2011//12	2012/13	2013/14
Return on equity	28.1	30.9	33.4	35.7	37.7
Return on debt	33.0	36.2	39.2	42.0	44.3
Return on capital	**61.0**	**67.1**	**72.5**	**77.7**	**82.0**

6.3 Corporate income tax

ActewAGL Distribution's revised estimation of corporate income tax, and the value of imputation credits, is provided in Table 6.4.

Table 6.4 – ActewAGL Distribution revised corporate income tax estimation

$ million (nominal)	2009/10	2010/11	2011//12	2012/13	2013/14
Tax payable	10.6	12.3	12.9	12.2	12.7
Value of imputation credits	(5.3)	(6.2)	(6.4)	(6.1)	(6.3)
Tax allowance	**5.3**	**6.2**	**6.4**	**6.1**	**6.3**

6.4 Operating and maintenance expenditure

ActewAGL Distribution's revised operating and maintenance expenditure proposal is provided in Table 6.5.

Table 6.5 – ActewAGL Distribution revised operating and maintenance expenditure

$ million (nominal)	2009/10	2010/11	2011//12	2012/13	2013/14
Operating expenditure	65.1	71.5	77.8	84.5	89.2

6.5 X-factors for standard control services

The control mechanism applied to standard control services in the ACT is a maximum average revenue cap. This constraint is expressed as the maximum allowed annual revenue for network services per kWh (revenue yield).

Table 6.6 provides ActewAGL Distribution's maximum annual revenue yield calculated in accordance with the PTRM.

Table 6.6 – ActewAGL Distribution maximum annual revenue yield – standard control

$ million (nominal)	2009/10	2010/11	2011//12	2012/13	2013/14
Regulatory depreciation	14.5	16.2	17.9	19.5	21.3
Return on capital	61.0	67.1	72.5	77.7	82.0
Tax allowance	5.3	6.2	6.4	6.1	6.3
Operating expenditure	65.1	71.5	77.8	84.5	89.2
Unsmoothed revenue requirement	**145.86**	**160.97**	**174.70**	**187.85**	**198.96**
Energy forecasts (GWh)	2,936.0	2,878.9	2,900.2	2,919.8	2,933.9
Revenue yield ($/kWh)	0.0409200	0.0539317	0.0564219	0.0590271	0.0617526
Smoothed revenue requirement	**158.58**	**162.67**	**171.44**	**180.57**	**189.82**
Revised X factors (%)	+28.69	+2.00	+2.00	+2.00	+2.00

6.6 X-factors for alternative control services

ActewAGL Distribution submits a revised building block proposal to the AER for its alternative control services for the next regulatory period. A summary of the elements, including annual revenue requirement and X-factors are provided in Table 6.7. This proposal incorporates:

- additional capital and operating expenditure relating to the introduction of the feed-in tariff scheme;
- an adjustment to the originally proposed self insurance allowance;
- the revised nominal vanilla WACC proposal for standard control services of 10.31 per cent;
- a revised proposal for forecast debt and equity raising costs; and
- a revised set of input cost escalators in response to the draft decision;

Further details relating to the calculation of the building blocks can be found in ActewAGL Distribution's revised RFM and PTRM for alternative control services, provided as attachments 5 and 6 to this revised proposal.

A summary of ActewAGL Distribution's revised building block proposal and annual maximum allowable revenue for alternative control services is provided in Table 6.7.

Table 6.7 – ActewAGL Distribution maximum annual revenue yield – alternative control

$ million (nominal)	2009/10	2010/11	2011//12	2012/13	2013/14
Regulatory depreciation	1.2	1.3	1.4	1.5	1.6
Return on capital	3.9	4.5	4.8	5.1	5.4
Tax allowance	0.4	0.4	0.4	0.5	0.5
Operating expenditure	2.5	2.0	2.1	1.9	2.1
Unsmoothed revenue requirement	**8.01**	**8.24**	**8.70**	**8.93**	**9.50**
Smoothed revenue requirement	8.22	8.43	8.64	8.87	9.09
Revised X factors (%)	+41.38	+0.00	+0.00	+0.00	+0.00

7. Responses to other elements of the draft decision

7.1 Cost pass through

7.1.1 ActewAGL Distribution regulatory proposal

ActewAGL Distribution proposed five pass through events, in addition to the four defined in the *NER*:

- a major natural disaster event;
- a transitional period event;
- a smart meter event;
- an input price event; and
- a supply curtailment event.

ActewAGL Distribution proposed that the pass through provisions apply to alternative control services as well as standard control services.

In addition, ActewAGL Distribution raised the matter of materiality thresholds for cost pass through claims. We proposed that no materiality threshold should apply to certain scheduled or foreseen events. In such cases, if the timing and details of the events were known when the regulatory proposal was submitted, these expenditure forecasts would have been included in the regulatory proposal. However, given the uncertainty at the time of submission of ActewAGL Distribution's proposed cost pass through provisions, it would be unreasonable to penalise ActewAGL Distribution by potentially not allowing recovery of amounts that fall below a pass through threshold, where policy details have not been finalised.

7.1.2 AER draft decision

The AER concluded that the major natural disaster event met its assessment criteria for nominated pass through events, and it therefore accepted the event, with some changes to the definition of the event. However, the AER did not accept the other four proposed events.

The AER also concluded that the transitional *Rules* do not preclude the pass through provisions applying to alternative control services.

The AER was silent on ActewAGL Distribution's materiality threshold proposal. The AER had scheduled the release of a guideline on a cost pass through materiality threshold for March 2008. The guideline has not yet been released.

7.1.3 ActewAGL Distribution response

Transitional period event

The transitional period is defined as the period between the submission of ActewAGL Distribution's original regulatory proposal (2 June 2008) and the end of the current regulatory period (30 June 2009).

ActewAGL Distribution's regulatory proposal noted a number of potential events that could occur in the transitional period. While some of these events have occurred or are now able to be forecast and are reflected in this revised proposal[131], there remains the possibility that other events may occur in the transitional period that lead to significant costs that may not be able to be recovered by ActewAGL Distribution via a clear mechanism. For example, ActewAGL Distribution noted in its original proposal the potential for the Australian Radiation Protection and Nuclear Safety Agency *Radiation Protection Standard: Maximum Exposure Levels to Electric and Magnetic Fields 0 Hz – 3 kHz* to be finalised in the transitional period, as well as the enactment of the new Workplace Safety Act in the ACT.[132] In addition, other pass through events such as a major natural disaster could occur in this transitional period.

ActewAGL Distribution notes the AER's clarification that if an event occurred within 90 days prior to the commencement of the 2009-14 regulatory period that it would be able to consider costs associated with the event.[133] There remains scope, however, for an event to occur that falls outside this window.

The AER's rejection of the proposed transitional period event exposes ActewAGL Distribution to the risk of being unable to recover the efficient costs of delivering its services. ActewAGL Distribution therefore considers that the rejection is inconsistent with the requirement of the *NEL* that the AER must:

> … provide ActewAGL with the opportunity to recover sufficient revenues to meet the efficient costs of providing its direct control services and complying with regulatory obligations.[134]

ActewAGL Distribution seeks the AER's reconsideration of the proposed transitional period event. If the AER rejects the transitional period pass through event in the final decision, the AER should confirm that it will recognise any cost pass throughs approved by the ACT ICRC relating to events that fall in the remainder of the current regulatory period, and incorporate those pass through amounts during the 2009-14 regulatory period. This will help to ensure that ActewAGL Distribution is able to recover the efficient costs of delivering its services and meeting its regulatory obligations.

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[131] For example the finalisation of the AER's STPIS reporting requirements and the forthcoming introduction of the ACT feed-in tariff scheme, as discussed in chapter 2 of the revised proposal.
[132] ActewAGL Distribution 2008*, 2009-14 Regulatory Proposal*, pp 82-83
[133] AER *Draft Decision*, p 168
[134] *National Electricity Law* section 7A

Major natural disaster event

The AER has accepted ActewAGL Distribution's proposal to include a major natural disaster event as a cost pass through event. However, the AER has adopted a different definition to that proposed by ActewAGL Distribution. This has important implications, in light of the AER's draft decision on self insurance.

ActewAGL Distribution defined a major natural disaster as follows:[135]

> **A major natural disaster event**: Any major natural disaster (but excluding bushfire or an earthquake which registers less than or equal to 6 on the Richter Scale) which results in costs incurred by ActewAGL Distribution which are materially different to those incorporated into the AER's determination for the 2009–2014 regulatory period and which would not have been incurred but for the occurrence of the event.

This definition recognised ActewAGL Distribution's proposed self insurance allowance that included the cost risk associated with bushfires and earthquakes which register less than or equal to 6 on the Richter Scale.

The AER has defined a major natural disaster as follows:[136]

> **A major natural disaster event:** Any major natural disaster (but excluding any insurable events – that is, those events for which external insurance or self insurance is feasible) which results in the costs of providing direct control services incurred by ActewAGL that are materially different to those contained in the AER's determination for the next regulatory control period and which would not have been incurred but for the occurrence of the event.

The reference in the AER's definition to exclusion of cases where the event is "insurable" or where external or self insurance is "feasible" is not appropriate. ActewAGL Distribution considers that the definition should be changed to "but excluding any insured events – that is, those events for which the costs of external insurance or self insurance has been approved by the AER". ActewAGL Distribution notes, for example, that self insurance for the risks associated with bushfires is feasible and justified under the transitional *Rules* and for this reason had been included in the self insurance component of ActewAGL Distribution's regulatory proposal. However, the AER has not accepted the proposed self insurance premiums relating to bushfires, with the exception of a small premium relating to very minor bushfires ignited by ActewAGL Distribution's own assets.[137] It is ActewAGL Distribution's position that major natural disaster events should only be excluded from the pass through provisions if they are covered by either external insurance or an approved self insurance allowance in the AER's determination.

As noted in chapter 5 of this revised regulatory proposal, the AER rejected ActewAGL Distribution's proposed self insurance allowances for earthquakes registering greater than 5

[135] ActewAGL *Regulatory proposal*, p 270
[136] AER *Draft Decision*, p 171
[137] AER *Draft Decision*, p 112

on the Richter Scale and major bushfires events. ActewAGL Distribution accepts the AER's draft decision and considers that these events should be included as approved cost pass through events.

This approach is consistent with the AER's discussion in the draft decision regarding appropriate pass through events stating, amongst other things, that the AER's decision over whether to approve a pass through event would include consideration of whether "the event cannot be self insured because a self insurance premium cannot be calculated or the potential loss to ActewAGL is catastrophic".[138]

ActewAGL Distribution notes that the above AER major natural disaster event definition, with the inclusion of ActewAGL Distribution's proposed revision, would incorporate these earthquake and major bushfire events.

Force majeure

ActewAGL Distribution notes that the AER has in its draft decision for NSW accepted Energy Australia's proposal to include *Force Majeure* as a pass through event. The event will also apply to Country Energy and Integral Energy, even though they did not propose the event.

ActewAGL Distribution proposes that force majeure be added to the pass through events for the ACT determination. We acknowledge that the AER has accepted the major natural disaster event for ActewAGL Distribution, and there is some overlap in the definitions. However, force majeure covers a wider range of events – for example acts of terrorism or riots.

The AER's rejection of ActewAGL Distribution's proposed supply curtailment event leaves ActewAGL Distribution exposed to the risk of costs associated with supply curtailment due to events beyond its control. Accepting force majeure as a pass through event for ActewAGL Distribution may also help to manage this risk. However ActewAGL Distribution would remain exposed to the risk of costs associated with supply curtailment events that are not covered by a force majeure event. Furthermore, there remains no clear mechanism for ActewAGL to be compensated for the possible foregone revenue impacts of a supply curtailment event, as the AER has concluded that the NER does not provide for recovery of foregone revenue through the cost pass through mechanism.

To help ensure that events that are beyond the control of ActewAGL Distribution are adequately covered by the pass through provisions, and to ensure consistency where appropriate across jurisdictions, ActewAGL Distribution proposes that force majeure be added to the pass through events for the ACT determination.

Materiality threshold

In the original proposal ActewAGL Distribution argued that no materiality threshold should apply to pass through claims in cases where ActewAGL Distribution would have included the costs in the expenditure forecasts if possible, but was unable to for various reasons (for

[138] AER *Draft Decision*, p 167

example where the details of new regulatory requirements were not finalised in time for forecasts to be included in the proposal). Applying a materiality threshold could mean that costs that would be claimed in full if included in the forecasts may not be covered because they fall below a threshold.

The AER's draft decision in relation to the UNFT reaffirms the importance of having a zero threshold in certain circumstances. ActewAGL Distribution proposed that an annual *unders and overs* adjustment be applied to deal with differences between the forecast tax and actual tax payable. The AER has rejected this proposal, noting that:

> an adjustment of the UNFT rate could be appropriately described as a 'change in a relevant tax' or else a 'change…in the rate of a relevant tax'. Accordingly, a change in the actual tax rate set by the ACT Government would constitute a tax change event which is a pass through event.[139]

ActewAGL Distribution still considers that an annual unders and overs adjustment is appropriate to deal with differences between the forecast tax and actual tax payable. However, if the AER does not change its position on the proposed adjustment mechanisms in its final decision, the materiality threshold for the tax change event must be set at zero to ensure ActewAGL Distribution is able to fully recover the costs of the tax and to ensure that customers do not overpay for the costs of the UNFT. Continuing to apply the draft decision on the UNFT, in conjunction with the application of a materiality threshold, would impose uncompensated-for risks on ActewAGL Distribution which would be in contravention of ACT Government policy intentions in relation to pass through of these costs.[140]

Similarly, ActewAGL Distribution considers that an annual unders and overs adjustment is appropriate to deal with differences between the forecast direct tariff costs under the ACT feed-in tariff scheme and actual direct tariff costs incurred under the scheme, as discussed in section 2.4.5 above. In the event that the AER does not approve ActewAGL Distribution's proposal for an annual adjustment mechanism for actual tariff costs, ActewAGL Distribution considers that these annual determinations should be considered "regulatory change events". As such, a determination should trigger scope for ActewAGL Distribution to make a pass through application to the AER for changes in costs under the scheme under the pass through provisions of the transitional *Rules*. The materiality threshold for these regulatory change events must be set at zero in order to ensure that ActewAGL Distribution is able to recover the costs of the scheme.

7.2 Assigning customers to tariff classes

Clause 6.12.1(17) of the transitional *Rules* requires the AER to make:

> a decision on the procedures for assigning customers to *tariff* classes, or reassigning customers from one *tariff* class to another (including any applicable restrictions).

[139] AER *Draft Decision*, p 118
[140] Chief Minister Jon Stanhope, ACT Legislative Assembly Hansard, 23 November 2006, p 3876

ActewAGL Distribution's interpretation of this requirement is that the procedures are meant to apply to cases where the DNSP does allocate customers to particular tariffs and the allocation has implications for compliance with the control mechanism – as under a weighted average price cap which applies in NSW, but not in the ACT.

ActewAGL Distribution does not assign customers to tariff classes. This is an integral part of ActewAGL Distribution's pricing principles and philosophy where customers are able to choose the tariff class which best suits their needs, subject to a minimal level of rules regarding eligibility to select particular tariffs.

ActewAGL Distribution seeks confirmation from the AER that its decision on procedures for assigning or re-assigning customers to tariff classes does not require ActewAGL Distribution to assign customers, as this would remove the existing freedom of consumers and retailers to select the most appropriate network charge.

7.3 Control mechanisms

7.3.1 Recovery of TUOS

In Appendix E of the draft decision, the AER has set out a table showing an example of the calculation of a transmission *unders and overs* account. The example shows Year 1 (actual) and Year 3 (forecast). It omits Year 2 and in doing so ActewAGL Distribution believes it may omit the interest that should be paid or earned on the closing balance from the first year that is added to the opening balance of the third year to be recovered in that year.

7.3.2 Side constraints

In Appendix E of the draft decision, the formula for the side constraint draws upon the actual load in the previous financial year. However the formula for prices used the actual load for the previous calendar year. This appears to be a redundant requirement.

ActewAGL Distribution considers that it would be more appropriate to apply the load for the previous calendar year to pricing and to calculate the side constraint.

7.4 Demand management incentive scheme (DMIS)

The AER's draft decision in relation to the demand management incentive scheme (DMIS) is, subject to ActewAGL Distribution's agreement, to replace the original demand management incentive allowance (DMIA) proposed in February 2008 with a replacement DMIA.

ActewAGL Distribution has reviewed the proposed replacement DMIA and agrees that it should replace the original DMIA.

While on balance ActewAGL Distribution agrees that the replacement scheme is an improvement on the original scheme, it has some remaining concerns with both schemes.

Neither scheme allows distributors to recoup revenues associated with tariff based demand management projects. The new scheme explains that this is because tariff-based demand

management programs are unlikely to result in a DNSP foregoing revenues, despite any fall in demand associated with customer responses to higher prices.[141] That is not the case with ActewAGL Distribution, which is subject to an average revenue cap. ActewAGL Distribution is not able to increase its average prices, so that any reduction in consumption will result in lower revenue.

A further significant concern is that the administrative burden relating to reporting requirements are quite extensive for a scheme which involves a relatively small allowance, particularly for ActewAGL Distribution as the smallest of the four DNSPs subject to the scheme. It is likely that the scheme reporting and administration costs may inadvertently consume a disproportionate share of the fund.

7.5 Negotiable components

ActewAGL Distribution's original proposal included a criterion to be adopted in order to identify negotiable components of direct control services. The proposal also included a negotiating framework to apply to such components.

In the draft decision the AER approved ActewAGL Distribution's proposed negotiating framework. However, the AER did not accept the proposed approach to identifying negotiable components.

ActewAGL Distribution proposed that the following criteria be adopted in order to identify negotiable components of direct control services:

> A negotiable component of a direct control service is any component service (including the terms and conditions on which that component is provided) where some variability can be applied without interfering with ActewAGL Distribution's ability to comply with any regulatory obligation or requirement, including those in the *NER.*

ActewAGL Distribution also provided a list of examples of components of direct control services that would satisfy the criteria.

The AER has accepted ActewAGL Distribution's comments on the need for a flexible and non-prescriptive approach to identifying negotiable components[142]. Notwithstanding this it has not accepted the proposed criteria, and has instead adopted the definition proposed by Integral Energy in its regulatory proposal for the NSW distribution determination.[143] The AER notes that the Integral definition:

> … is consistent with the examples of possible components provided by ActewAGL.[144]

ActewAGL Distribution considers that the AER has rejected its proposed criteria and replaced it with an alternative, as proposed by another DNSP, without establishing that

[141] AER November 2008, *Demand management incentive scheme for the ACT and NSW 2009 distribution determinations: Demand management innovation allowance scheme*, p 8
[142] AER *Draft Decision*, p. 16.
[143] AER *Draft Decision*, p. 17.
[144] AER *Draft Decision*, p. 17.

ActewAGL Distribution's proposal is unreasonable, and without establishing that the alternative will deliver better outcomes. ActewAGL Distribution considers that its original proposed approach is consistent with the requirements of the transitional *Rules*. It is flexible to accommodate a wide range of possible circumstances and provides guidance for customers or potential customers on what services are likely to be negotiable.

7.6 Price impacts

7.6.1 Estimated price impacts of the draft decision

ActewAGL Distribution notes that the AER refers to the estimated price impacts of the draft decision as follows:

> As a result of the draft decision, the AER has estimated that the average ACT retail customer's electricity charge is likely to increase by 4.1 per cent in 2009.[145]

ActewAGL Distribution estimates that the draft decision would result in a 5.9 per cent increase in the average residential[146] customer's bill in 2009/10. This estimated increase includes the impact of both network and metering (alternative control) charges.

The AER also says in the draft decision that:

> The percentage price increase will be greatest in 2009, reflecting the fact that ActewAGL overspent its capital allowance in the previous regulatory control period by $42 million.[147]

ActewAGL Distribution notes that the higher percentage price increase in 2009, compared with the subsequent years, is not the result of overspending by ActewAGL Distribution in the current regulatory control period. Consistent with the requirements of the transitional *Rules*, the percentage increase in network prices is larger in 2009 than in the subsequent years to reflect the profile of capital expenditure over the 2009-14 period. Relatively high capital expenditure is required in the first year of the regulatory period, and this is reflected in higher prices in the first year.

7.6.2 Estimated price impacts of the revised regulatory proposal

ActewAGL Distribution estimates that the revised regulatory proposal would result in a 9.7 per cent increase in the average residential[148] customer's bill in 2009/10. This estimated increase includes the impact of both network and metering (alternative control) charges.

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[145] AER *Draft Decision*, p xi
[146] Consuming 8000 kWh per annum
[147] AER *Draft Decision*, p xi
[148] Consuming 8000 kWh per annum

Attachment 1 – Revised Roll Forward Model (standard control)

Provided as a separate document.

Attachment 2 – Revised Tax Asset Base Roll Forward Model (standard control)

Provided as a separate document.

Attachment 3 – Revised Post Tax Revenue Model (standard control)

Provided as a separate document.

Attachment 4 – Revised Roll Forward Model (alternative control)

Provided as a separate document.

Attachment 5 – Revised Tax Asset base Roll Forward Model (alternative control)

Provided as a separate document.

Attachment 6 – Revised Post Tax Revenue Model (alternative control)

Provided as a separate document.

Attachment 7 – Network connectivity solution project justification (confidential)

Provided as a separate document.

Attachment 8 – ACT Government Feed-in Tariff Slide Pack

Provided as a separate document.

Attachment 9 – ACT Feed-in Tariff Scheme – direct tariff cost proposal (confidential)

Provided as a separate document.

Attachment 10 – Averaging period (confidential)

Provided as a separate document.

Attachment 11 – AER averaging period letter 080708 (confidential)

Provided as a separate document.

Attachment 12 – ActewAGL Distribution averaging period letter 140808 (confidential)

Provided as a separate document

Attachment 13 – AER averaging period letter 200808 (confidential)

Provided as a separate document.

Attachment 14 – "Rate of return and the averaging period under the National Electricity Rules and Law", report prepared by Competition Economists Group (confidential)

Provided as a separate document.

Attachment 15 – "Debt and Equity Raising Costs", report prepared by Competition Economists Group (confidential)

Provided as a separate document.

Attachment 16 – "Response to AER's Draft Decision – Self Insurance" report prepared by SAHA International (confidential)

Provided as a separate document.

Attachment 16A – Letter confirming actuarial assessment of identified self insurance risk premiums by Clive Amery FIAA (confidential)

Provided as a separate document.

Attachment 17 – Statutory Declaration

Provided as a separate document.

Attachment 18 – Certification Statements

Provided as a separate document.

Attachment 19 – Abbreviations

ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACG	Allen Consulting Group
ACT	Australian Capital Territory
AER	Australian Energy Regulator
ANZSIC	Australian and New Zealand Standard Industrial Classification
AUD	Australian Dollar
BOM	Bureau of Meteorology
capex	capital expenditure
CBA	Commonwealth Bank of Australia
CEG	Competition Economists Group
CGS	Commonwealth Government Security
CIE	Centre for International Economics
CPI	Consumer Price Index
CPRS	Carbon Pollution Reduction Scheme
DMIA	Demand Management Incentive Allowance
DMIS	Demand Management Incentive Scheme
DNSP	Distribution Network Service Provider
EBSS	Efficiency Benefit Sharing Scheme
EGW	Electricity, Gas and Water
EMA	Emergency Management Australia
FiT	Feed-in Tariff
GFC	Global Financial Crisis
GIS	Geographic Information System
GWh	Gigawatt Hours
ICRC	Independent Competition and Regulatory Commission
IT	Information Technology
km	Kilometre
kV	Kilovolt
kW	Kilowatt
kWh	Kilowatt hours
LME	London Metal Exchange
m	Million
MMA	McLennan Magasanik Associates
MRET	Mandatory Renewable Energy Target
MRP	Market Risk Premium
NEL	National Electricity Law
NER	National Electricity Rules
NIEIR	National Institute of Economic and Industry Research
NSW	New South Wales
opex	operating expenditure

PoE	Probability of exceedance
PPI	Producer Price Indices
PTRM	Post-Tax Revenue Model
PV	Photovoltaic
RAB	Regulatory Asset Base
RBA	Reserve Bank of Australia
REC	Renewable Energy Certificate
RFM	Roll Forward Model
RIN	Regulatory Information Notice
SA	South Australia
SAHA	SAHA International
SKM	Sinclair Knight Merz
STPIS	Service Target Performance Incentive Scheme
TNSP	Transmission Network Service Provider
TUOS	Transmission Use of System
TWI	Trade Weighted Index
UNFT	Utilities Network Facilities Tax
USD	United States of America Dollar
WACC	Weighted Average Cost of Capital
Wilson Cook	Wilson Cook and Co.

Attachment 20 – Revised RIN pro formas (confidential)

Provided as a separate document.