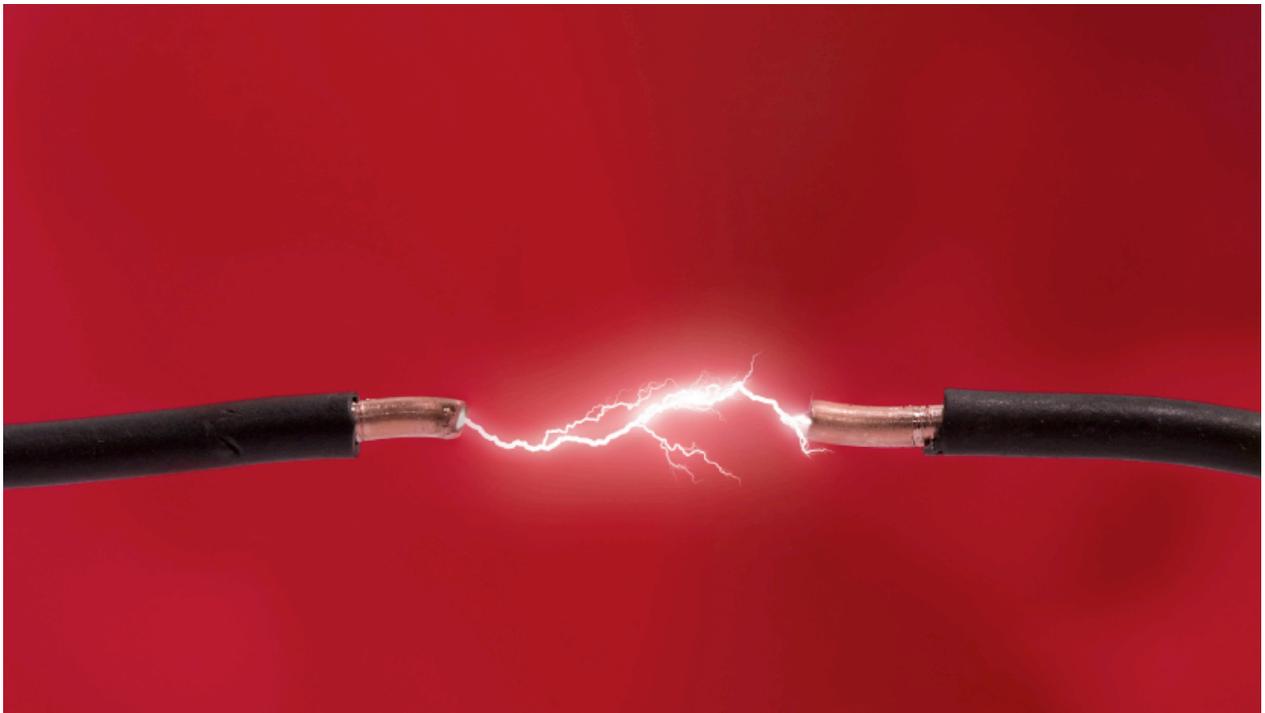


The **Allen Consulting** Group



Review of the effectiveness of competition in the electricity retail market in the ACT

Price and profit margin analysis

July 2010

Report to Australian Energy Market Commission

The Allen Consulting Group

Allen Consulting Group Pty Ltd
ACN 007 061 930, ABN 52 007 061 930

Melbourne

Level 9, 60 Collins St
Melbourne VIC 3000
Telephone: (61-3) 8650 6000
Facsimile: (61-3) 9654 6363

Sydney

Level 1, 50 Pitt St
Sydney NSW 2000
Telephone: (61-2) 8272 5100
Facsimile: (61-2) 9247 2455

Canberra

Empire Chambers, Level 2, 1-13 University Ave
Canberra ACT 2600
GPO Box 418, Canberra ACT 2601
Telephone: (61-2) 6204 6500
Facsimile: (61-2) 6230 0149

Online

Email: info@allenconsult.com.au
Website: www.allenconsult.com.au

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Chapter 1

Introduction

The Australian Energy Market Commission (AEMC) is required to conduct a review of the effectiveness of competition in the electricity and gas retail markets in all National Electricity Market (NEM) jurisdictions.¹ The reviews are intended to form the basis for an assessment of the effectiveness of competition in each jurisdiction, and for subsequent recommendations to phase out retail price regulation where competition is found to be effective or to promote competition where it is not. The AEMC's Revised Statement of Approach (2009) sets out the AEMC's framework in undertaking its reviews and identifies a number of market performance indicators that the AEMC will consider, including prices and profit margins.

1.1 Terms of reference

The Allen Consulting Group (ACG) was engaged to undertake an analysis of electricity retail price and profit margins in the ACT. The terms of reference require ACG to:

1. On the basis of estimated profit margins available under the regulated retail price in the ACT electricity market, comment on the attractiveness of entry and expansion in the market for the period. This requires, for the period from 2003 to 2011:
 - A desktop review of the approach used by the Independent Competition and Regulatory Commission (ICRC) to determine the efficient cost base for ActewAGL Retail, the incumbent electricity retailer in the ACT;
 - A description and justification of any required changes to the ICRC methodology, and the derivation of estimates for the identified change(s) in the efficient cost base; and
 - Tabulating the regulated retail price in the ACT over the relevant time horizon to determine estimated profit margins.
2. Based on a comparison of market prices to regulated retail prices, comment on the attractiveness of entry and expansion in the market for the period from 2003 to 2011.

¹ The ACT retail competition review will only consider electricity as natural gas is not subject to retail price regulation.

1.2 Structure of this report

This report is structured as follows:

- Chapter 2 provides an overview of the components of regulated electricity retail costs, describes the approach taken by the ICRC in determining regulated retail prices for ActewAGL Retail, and contrasts this approach with that taken by regulators in other jurisdictions. It then provides a recalculation of the regulated tariff, and discusses the impact on real changes in the tariff and profit margins.
- Chapter 3 describes the various prices charged by electricity retailers in the ACT, and comments on the level of competition and the attractiveness of entry and expansion.

The detailed information referred to in these Chapters is presented in two appendices:

- Appendix A describes the ICRC's determinations for ActewAGL Retail in detail; and
- Appendix B describes determinations for regulated electricity prices made by regulators in other jurisdictions.

1.3 Summary of findings

The method used for determining regulated electricity tariffs in the ACT is similar to that used in other jurisdictions, in that tariffs are calculated by deriving three main components that make up electricity retailers' costs:

- Wholesale electricity costs (WEC), the costs of purchasing wholesale electricity either in the spot or the contract market, as well as various ancillary costs and 'green' energy requirements;
- Retail operating costs (ROC), which are ongoing expenditures incurred by retailers in the course of their operations; and
- A retail margin to compensate retailers for business risks.

The main difference between the approach taken by the ACT regulator (the ICRC) and that applied by (most, but not all) regulators in other Australian jurisdictions where full retail contestability (FRC) has been introduced is that the electricity tariff determinations do not include a customer acquisition (and retention) costs (CAC or CARC) item in the ROC.

A CAC allowance is intended to account for the cost of acquiring new customers in a competitive market, such as marketing costs and the costs of transferring customers. The CARC allowance also considers the costs involved in retaining existing customers in a competitive market. The inclusion of an allowance for CAC/CARC effectively raises regulated tariffs and thereby the 'price to beat' for competing retailers offering market contracts. If regulated retail electricity prices do not include a CAC/CARC item, retailers offering market contracts may find it difficult to compete for new customers with the incumbent (in this case, ActewAGL Retail), since they would not be able to recover their marketing expenditures *and* earn a reasonable margin at the same time.

The ICRC has considered the question whether or not to include a CAC/CARC item in the ROC a number of times, including in its most recent draft and final determinations for ActewAGL Retail (ICRC 2010c, 2010d). The ICRC considered that the apparent lack of competition in the ACT retail electricity market was likely to reflect a number of factors, including barriers to entry arising from the existence of a dominant incumbent (i.e. ActewAGL Retail), a lack of customer knowledge about FRC, and relatively low regulated tariffs, which at least in part reflect the absence of a CAC/CARC element. The ICRC also argued that its ROC includes an allowance for marketing costs (which forms part of CAC/CARC).

The ICRC was therefore not convinced that the inclusion of a CAC/CARC item would necessarily result in improved retail competition, and was furthermore concerned that a significant number of customers (at least those remaining on regulated tariffs) would likely be worse off as a result. Given the ICRC's terms of reference, which require it to balance multiple objectives, including encouraging competition and consumer protection, the ICRC therefore elected not to include a CAC/CARC item in the ROC.

To investigate the implications of not including a CAC/CARC element in the determination of ROC, we recalculated ActewAGL Retail's regulated electricity tariffs, including a range of CAC/CARC allowances that reflect those used in other jurisdictions. Including a CAC/CARC allowance in ActewAGL Retail's overall cost determination implies a (significantly) lower 'effective' retail margin relative to the 'headline' retail margin determined by the ICRC. That is, if it is assumed that competing retailers would generally price at the same level and have the same costs as ActewAGL Retail, but must additionally incur marketing and other acquisition costs to attract new customers (corresponding to the CAC/CARC allowance), they would effectively earn a lower retail margin than ActewAGL Retail's regulated margin.

Table 1.1 summarises effective retail margins for the low, intermediate and high CAC/CARC estimates that we have applied in the analysis. One reason for a perceived lack of electricity retail competition in the ACT may therefore be that retail margins were (and are) too low for entry to be profitable, so that entry and expansion into the ACT electricity retail market would not have been (and is unlikely to be) attractive.

Table 1.1

ACTEWAGL RETAIL'S REGULATED RETAIL MARGIN AND EFFECTIVE RETAIL MARGINS

	2007-08	2008-09	2009-10	2010-11
Retail margin				
Regulated retail margin as determined by ICRC for ActewAGL Retail	4.00%	5.00%	5.00%	5.40%
Effective retail margin:				
Low CAC/CARC (\$26 per customer per annum)	2.07%	3.11%	3.15%	3.48%
Intermediate CAC/CARC (\$36 per customer per annum)	1.34%	2.41%	2.45%	2.77%
High CAC/CARC (\$42 per customer per annum)	0.91%	1.99%	2.04%	2.34%

Source: Allen Consulting Group calculations.

Currently only two retailers (the incumbent ActewAGL Retail and TRUenergy) are participating in the retail electricity market (ICRC 2010c), although our research indicates that TRUenergy may no longer be actively marketing to attract new customers. Two other licensed retailers, EnergyAustralia and Country Energy, also appear only to be catering to existing customers and are not accepting new customers. Both ActewAGL Retail and TRUenergy charge similar tariffs for market contracts, and also offer discounts to customers for direct debit agreements or prompt bill payments. There is little evidence of tariff innovation.

It is also notable that ActewAGL Retail offers bundling discounts of up to 25 per cent off customers' electricity bills, up to a cap of \$500. These discounts are available when customers combine several services provided by ActewAGL, the incumbent electricity, natural gas, water and wastewater provider in the ACT, with services offered by TransACT, a telecommunications services provider run by ActewAGL. ACTEW (a government owned business), which has a 50 per cent stake in ActewAGL Retail, also has an 18 per cent stake in TransACT. No other electricity retailer appears to be offering discounts of this magnitude or bundling to this extent to compete with the incumbent ActewAGL Retail.

Overall, there are a range of indicators to suggest that competition in electricity retailing in the ACT is weak, as is also accepted by the ICRC in its most recent determination (ICRC 2010c):

- ActewAGL Retail remains by far the dominant electricity retailer in the ACT;
- Aside from ActewAGL Retail, there are few or no retailers actively competing for new customers by offering market contracts;
- There is little indication of competition on price, or of innovative tariff structures for retail electricity; and
- Compared to other jurisdictions, rates of customers switching between retailers are low.

It is possible that other events in the NEM, in particular high prices during the 2006-07 and 2007-08 drought years also contributed to a decline in retail competition and customer switching. This is consistent with the observation that while there was some entry when FRC was first introduced, competitive activity declined post 2007.

However, overall, the analysis we have undertaken in this report points to two key reasons why few or no new competing market offers are currently available to electricity retail customers in the ACT:

- Our analysis of regulated retail tariffs, taking into account a competitor's cost of acquiring new customers suggests that competing retailers would need to accept (significantly) lower margins to attract new customers than what is generally considered reasonable in electricity retailing.
- Additionally, it appears that competing retailers have not matched the multi-service discounts that ActewAGL Retail offers its electricity customers that also purchase telecommunications services from its affiliate.

Given these factors, competitive entry and expansion in the ACT electricity retail market would have been unattractive from 2007 onwards, and this remains the case today.

Chapter 2

Regulated electricity retailing costs

This chapter sets out the method by which regulated electricity retailing costs are determined in the ACT and in other States and Territories. First we review the regulatory objectives used by the various regulators; then we discuss the cost components used and the methods for calculating them. Finally, we compare the ICRC method to that of other regulators, and recalculate the regulated tariff using the best practice approaches from other jurisdictions.

2.1 Regulatory objectives

FRC in electricity retailing to small customers has been introduced progressively in different jurisdictions since the beginning of 2002 (Table 2.1). The introduction of FRC has meant that retailers can offer customers ‘negotiated’ or ‘market’ contracts under which they supply electricity. Electricity retail tariffs under market contracts are not regulated. At the same time, and with the exception of Victoria, incumbent retailers are required to offer customers electricity supplied under regulated terms and conditions. These regulated terms and conditions are set by jurisdictional regulators. In the ACT, the relevant regulator is the ICRC.

Table 2.1

TIMETABLE FOR THE INTRODUCTION OF FULL RETAIL CONTESTABILITY FOR SMALL CUSTOMERS

Jurisdiction	Date
ACT	1 July 2003
New South Wales	1 January 2002
Queensland	1 July 2007
South Australia	1 January 2003
Victoria	13 January 2002
Tasmania	1 January 2011, pending assessment of benefits by the Office of the Tasmanian Economic Regulator
Western Australia	No FRC yet

In comparing the ICRC’s approach in setting ActewAGL Retail’s regulated tariffs with that taken by other regulators it is worth noting that the statutory requirements and responsibilities, including the terms of reference of regulators often differ.² This has a bearing on how regulated tariffs are calculated, and in particular, whether or not objectives to encourage competition feature in how regulated tariffs are set.

² Appendices A and B, which summarise the ICRC’s and other jurisdictional regulators’ pricing determinations briefly summarise the terms of reference.

Table 2.2 summarises the various regulators' objectives in setting tariffs. The ICRC's tariff determinations for ActewAGL Retail's franchise customers (referred to as 'transitional franchise tariffs' or 'TFTs') are based on an estimate of the efficient costs incurred by ActewAGL Retail. In contrast, the Independent Pricing and Regulatory Tribunal of New South Wales's (IPART's) terms of reference changed from determining the 'efficient costs of a Standard Retailer' in its earlier determinations, to determining the costs of a 'hypothetical retailer' whose costs would reflect those of a mass market new entrant. The Queensland Competition Authority (QCA) is required to establish the costs of a stand-alone retailer with an established customer base of a mix of customers.

Table 2.2

OVERVIEW OF REGULATORS' TERMS OF REFERENCE

Jurisdiction	Terms of reference for determining regulated electricity tariffs
ACT	
ICRC (2003-2010)	The Commission's price direction should allow for the recovery of the efficient costs incurred by ActewAGL Retail with respect to all relevant Australian Government and Territory policies. Efficient benchmark costs of electricity supply to ActewAGL Retail's TFT customers
ICRC 2010	Same as for 2003-2010, but additional requirement to investigate the price level that would result in vigorous competition in the market
New South Wales	
IPART (2002, 2004)	Efficient cost of Standard Retailers of serving customers
IPART (2007)	Costs of a 'hypothetical retailer', taking into account the retail operating costs and margin of a mass market new entrant
IPART (2009)	Efficient costs of a Standard Retailer
South Australia	
ESCOSA (2003, 2004)	AGL SA's actual costs and costs incurred by a prudent efficient retailer
ESCOSA (2005)	Costs of an efficient retailer
ESCOSA (2007)	Costs of an efficient retailer and encourage competition and investment
Queensland	
QCA (2007-2010)	Costs of a stand-alone established retailer with a significant share of the state market
Tasmania	
OTTER (2003-2007)	Efficient costs of providing services
Western Australia	
Office of Energy (2009)	Cost of supply

Notes: The ICRC's determinations are set out in detail in Appendix A. The determinations of other regulators are set out in Appendix B.

As set out in Section 2.2.3 below in the context of whether or not allowances are made for the costs of acquiring new customers, different regulatory objectives (to an extent) account for different regulatory approaches in practice. In this context, it is relevant that the ICRC's terms of reference primarily focus on efficiency and equity objectives (as set out in section 20 of the ICRC Act):

- Preventing the exploitation of monopoly power, which might otherwise raise costs for consumers (s. 20(2)(a));
- The need for greater efficiency in the provision of regulated services to reduce costs to consumers and taxpayers (s. 20(2)(c)); and
- The social impacts of the decision (s. 20(2)(g)).

These considerations would therefore lead the ICRC to set a 'minimum' price, rather than a 'competitive' price that would be sufficient to encourage other retailers from making market offers.

As is discussed in more depth in Section 2.2.3 below, the ICRC's terms of reference were amended for its most recent determination to include, among other things, a requirement to 'investigate the price level that would result in vigorous competition in the market' (ICRC 2010c). However, given the ICRC's terms of reference, which require it to balance multiple objectives, including encouraging competition and consumer protection, the ICRC elected not to include a customer acquisition cost item in its calculation of regulated retail tariffs.

2.2 Cost components

Regulators' approaches to determining retailers' costs of supplying customers on regulated terms and conditions vary in some respects and have evolved since the introduction of FRC. However, there is broad agreement as to the key cost components that make up these costs – WEC, ROC, and a retail margin. The only cost element of the ROC that is not used by all regulators are customer acquisition (and retention) costs (CAC/CARC).

The method used by the ICRC has remained consistent, except in the calculation of WEC where there have been some significant changes.³

2.2.1 Wholesale electricity costs

WEC include 'black' wholesale costs, being the cost of energy purchases in the spot and contract market, and 'green' wholesale costs, which are the additional costs of complying with greenhouse gas (GHG) policies. WEC additionally include NEM fees, ancillary services costs, and the costs of transmission and distribution losses.

ACT

Wholesale electricity costs determined by the ICRC for ActewAGL Retail include electricity purchase costs, energy contracting (or risk management) costs, green costs, NEM fees and energy losses.⁴

³ These are noted below and outlined in detail in Appendix A. The methodologies used in other jurisdictions are outlined in detail in Appendix B.

In the 2003 review, electricity purchase costs were based on ActewAGL Retail's estimates. The ICRC used its own calculations based on the price of forward contracts from 2007 onwards, changing the methodology slightly in 2009 to allow for a greater proportion of the load to be hedged. In 2010 the methodology was changed so that the average forward price over two years is used, multiplied by a 'forward price uplift factor', which is based on the load shape and hedging costs. From 2007 onwards, the ICRC has additionally provided a separate allowance for 'energy contracting' costs. It is unclear how this cost item was initially determined, but from 2008, it has been adjusted for annual inflation.

In addition to wholesale electricity costs, network (transmission and distribution) costs are measured separately. In earlier reviews these costs were based on information provided by ActewAGL Retail, but since 2009 regulated prices set by the Australian Energy Regulator (AER) have been used.

Other jurisdictions⁵

In all jurisdictions, regulators have gone to some effort to calculate an estimate of the efficient cost of purchasing wholesale electricity (WEC) in the specific context of the region, customer load profiles and other relevant factors.⁶ In calculating these costs they have taken different approaches, for instance:

- In New South Wales, WEC were initially based on the long run marginal cost (LRMC) of electricity generation, but IPART later changed its approach to calculate market-based costs of energy, or the higher of market-based and LRMC costs;
- In South Australia, the Essential Services Commission of South Australia (ESCOSA) has consistently modelled AGL SA's costs of purchasing contracts to hedge its load; while
- In Queensland, the QCA initially estimated WEC on the basis of the stand-alone LRMC cost of the most efficient combination of generating technologies for the Queensland region, but later moved to a 50/50 weighting of LRMC and market-based costs.

Where other components of WEC are concerned, all regulators have similarly included the costs of greenhouse gas (GHG) policies, including state-based regimes, which necessarily vary by jurisdiction. Thus QCA includes Mandatory Renewable Energy Target (MRET) costs and the costs of the Queensland Gas Scheme (QGS); IPART includes MRET, the NSW Greenhouse Gas Abatement Scheme (GGAS), the Energy Efficiency Scheme (EES), and the NSW Renewable Energy Target Scheme (NRET).

⁴ In earlier reviews only distribution losses were used, but from 2009 energy losses are a combination of transmission and distribution losses.

⁵ Regulatory determinations for electricity retail prices in Victoria are not in the public domain. Where available, we have relied on information derived from other sources.

⁶ For instance, many of the determinations we have reviewed discuss the appropriate methodology in considerable detail, and regulatory approaches have changed over the years as particular difficulties have become apparent.

The main differences between regulators are in the inclusion of various components in the WEC to reflect other identified risks, corresponding to ICRC's energy contracting costs, for instance:

- In its earlier determinations, IPART did not include such additional cost items, but from 2007 onwards, it included a 'volatility allowance' to cover the cost of holding working capital to withstand electricity market system volatility;
- ESCOSA consistently makes provisions for a 'hedge mismatch allowance', and an 'other risks' allowance; and
- In its 2007 determination (but not in later years) the QCA included an 'energy purchase factor' to reflect the mismatch between actual energy purchase costs and the LRMC of energy.

In summary, the main differences between the approach taken by the ICRC and that used by other regulators are in the calculation of energy purchase costs and the way risk is incorporated in the WEC. The energy purchase costs differ somewhat in that the ICRC uses a market-based approach that attempts to estimate actual wholesale purchase costs, while other regulators such as IPART and the QCA (additionally) use the long run marginal cost. ESCOSA uses the same approach as the ICRC. Overall the approach taken by the ICRC to calculate wholesale electricity costs seems reasonable and is broadly consistent with the methodologies used elsewhere.

2.2.2 Retail operating costs

ROC are the costs that retailers incur in the course of their ongoing operations, including the costs of billing and revenue collection, call centres, customer information, corporate overheads, energy trading costs, regulatory compliance costs, and marketing costs.

To determine the ROC component, regulators have typically looked to the actual costs of incumbent retailers and other regulatory determinations for guidance, although some (e.g. IPART) have undertaken detailed studies of these costs (including how they might vary depending on the scope and scale of a retailer). In nominal terms, these costs have typically ranged from \$65 to \$100 per customer, per annum. The approach to determining the ROC component is generally quite opaque.

In its initial assessment of the ROC in 2003, the ICRC similarly based its estimate on ActewAGL Retail's costs and the approach taken by regulators in other jurisdictions. In subsequent determinations the ICRC has increased the value of the ROC by the rate of inflation annually without apparently undertaking additional detailed analysis (or without making that analysis available).

Given the uncertainty about precisely how the ROC was determined, it is not possible to draw a firm conclusion about the method used by the ICRC. However, the ICRC's method seems consistent with that used by other regulators.

2.2.3 Customer acquisition (and retention) costs

Beginning with IPART's 2002 decision, and depending on their statutory requirements and terms of reference, some regulators have included a CAC component in their assessment of ROC. CAC refers to the costs of marketing to and transferring new customers, including the costs of:

- Sales agents, commissions, and telesales;
- Marketing materials, such as stationery, information booklets, and confirmation packs;
- Processing customer information and transfers, including credit checking; and
- Communications costs, such as telecommunications costs.

CAC calculations differ between regulators, but essentially rely on an assessment of the cost of attracting new customers and transferring them within the NEM systems. These costs are then amortised to a per customer, per annum figure using estimates of the length of time a customer remains with a retailer (i.e., the rate of switching).

The CAC approach has evolved since it was first introduced. For instance, IPART and the QCA now calculate a 'customer acquisition and retention cost' (CARC) component of ROC. This is intended to reflect the costs of an incumbent retailer that has to acquire new customers and retain its existing customer base. Estimating CARC requires an assessment of an (incumbent) retailer's acquisition, transfer and retention activities and costs in:

- Transferring a new customer from another retailer; and
- Transferring existing customers from a regulated to a market contract.

At least in principle, CARC is lower than CAC, since customer acquisition costs tend to be higher than customer retention costs. This reflects the assumption that an incumbent retailer would need to pay less to keep existing customers compared to an entrant retailer who would need to spend more to win entirely new customers. The shift to the use of a CARC, rather than a CAC item is therefore disadvantageous for competing retailers. Such retailers would have to incur the higher CAC to win new customers, as opposed to the lower CARC incurred by the incumbent retailer.

ACT

As discussed in Section 2.1 in the context of its terms of reference, the ICRC has not included an explicit CAC/CARC allowance in any of its determinations, although it does include an (unspecified) allowance for marketing costs (which form part of CAC/CARC) in its ROC. The ICRC has reviewed the inclusion of CAC/CARC in every price decision since 2007. In its recent draft and final reports on regulated prices for 2010-2012 the ICRC reflected on its methodology and on whether a CAC should be included (ICRC 2010c, 2010d). The ICRC decided not to include CAC mainly because it would not be consistent with its terms of reference.

The Terms of Reference for the 2010-2012 price review state that

[t]he Commission's price direction should examine the balance between encouraging competition in the retail electricity market and the level of the regulated price. Specifically, the Commission should investigate the price level that would facilitate in vigorous competition and the short-run and long-run costs and benefits of instituting such a price and the need to ensure appropriate consumer protection in the evolving electricity market.

[...] The Commission's price direction should allow for the recovery of the efficient costs incurred by ActewAGL with respect to all relevant Australian Government and Territory policies.

ICRC (2010c, p77)

The ICRC acknowledged that there are some indications that electricity retail competition is weak in the ACT, but considered that this was likely to reflect a number of factors, including barriers to entry arising from the existence of a dominant incumbent (i.e. ActewAGL Retail), a lack of customer knowledge about contestability, and relatively low regulated tariffs. The ICRC explained that it therefore found itself in a quandary (2010c). It could include an additional cost item in regulated tariffs to account for the cost of acquiring new customers and thereby raise prices to encourage competition. However, *if*, as a result:

- Competition *did not* result in lower prices than the current regulated tariff, all customers would be worse off and only electricity retailers would be better off; or, alternatively.
- Competition *did* result in lower prices than the current regulated tariff, all customers who remain on regulated tariffs would be worse off and only those customers who switch to competitive offers below the level of the regulated price would benefit.

In submissions received by the ICRC, retailers (including ActewAGL Retail) argued in favour of the inclusion of CAC since this would, in their view, strengthen competition. Consumer groups, on the other hand, argued against its inclusion because it would negatively impact on consumers, especially those who find it difficult to participate in the market, by raising prices.

The ICRC further considered the likely TFT increase that would be required in deciding whether or not to include a CAC/CARC component in the TFT. A \$4/MWh - \$5/MWh increase in the total retail cost allowance sought by ActewAGL Retail would translate into a 3 per cent increase in the overall TFT. However, comments by other large retailers indicated that the TFT would need to increase by around 5–10 per cent in order for them to consider becoming active in the ACT. Such an increase in the TFT would add \$60–\$120 to the annual bill for a typical small customer, and would be significantly higher than the CAC/CARC allowances approved by IPART/the QCA. The ICRC was accordingly not convinced that a real increase in the TFT in the order of 5 per cent would be sufficient to attract vigorous competition into the ACT retail market.

Overall, the ICRC concluded that by including CAC, compliance with one component of the terms of reference (encouraging competition) would be enhanced, while compliance with another component (consumer protection) would be reduced. On balance, the ICRC concluded that not including CAC would lead to better compliance with the Terms of Reference.

Other jurisdictions

As noted above, the approach taken by other retailers to including a CAC/CARC component has varied over the years, reflecting their terms of reference (Table 2.2):

- IPART did not include a CAC component in 2002 and 2004. In 2007 it included CAC in ROC, and in 2009 it switched to using a CARC estimate.
- ESCOSA did not include a CAC or similar component between 2003 and 2005, but stated that in its 2007 decision it had allowed some 'headroom' in AGL SA's ROC. ESCOSA did not clarify the precise meaning of the term 'headroom', although it might be presumed that the intention would be to raise prices somewhat above costs to encourage entry. ESCOSA also did not clarify how high this figure was.
- It is understood that the Victorian 2004-07 determination included a CAC component, the calculation of which was based on IPART's approach;
- The QCA has included a CARC component in each of its determinations since 2007. The QCA's 2007 estimate of CARC was intended to reflect additional costs to a retailer due to the loss of scale as customers departed in a competitive market (\$2 per customer, per annum); in subsequent determinations the QCA went to some trouble to calculate detailed (significantly higher) CARC estimates.

2.2.4 Retail margin

The retail margin is intended to compensate retailers for business risks. Australian regulators have applied net retail margins, defined either as a percentage of sales or as a percentage of controllable costs. Although regulated retail margins are relatively small in percentage terms, the fact that they are applied to a retailer's overall costs (either total sales, including network costs, or the sum of WEC and ROC) makes this a material cost item. In 2009/10, for instance, ActewAGL Retail's allowed TFT retail price was \$160.37/MWh, of which the retail margin component was \$7.64/MWh.

Regulators' approaches to setting net retail margins has sometimes reflected a detailed analysis of retailers' risks. For instance, in its recent determinations IPART has developed ranges for the retail margin using three alternative approaches, based on (IPART 2007, 2010):

- The expected cashflows (returns) that a retailer would earn from small customers and the systematic risk associated with these cashflows;
- A benchmarking approach that examines the reported margins of comparable listed firms to establish a range of the retail margin; and
- A bottom-up approach that starts from an assumed investment base and cost estimates, and then determines the earnings and revenue which would allow the retailer to earn an expected return equal to its estimated cost of capital.

However, as for the ROC, regulated retail margins are mostly based on a review of the approach taken in other jurisdictions. In its most recent decision, for instance, the ICRC cited IPART's most recent analysis, which resulted in a range of retail margins (Table 2.3).

Table 2.3

IPART: COMPARISON OF APPROACHES TO DERIVE RETAIL MARGIN (EBITDA, %)

	Low	High	Mid-point
Expected returns	3.4	4.8	4.1
Benchmarking	6.4	6.9	6.7
Bottom-up	4.5	6.3	5.4
Recommended range	4.8	6.0	5.4

Source: Independent Pricing and Regulatory Tribunal, 2010. "Review of regulated retail tariffs and charges for electricity 2010-2013", Electricity — Final Report, March.

The precise definition of how margins are calculated is often not clear, although it seems that, with the exception of ESCOSA, all regulators, including the ICRC, determine the retail margin as a percentage of relevant sales (WEC, ROC and network costs). ESCOSA sets the retail margin for AGL SA as a proportion of controllable costs (WEC and ROC).

2.3 Cost comparison

Table 2.4 below provides a summary of regulated electricity costs across Australian jurisdictions. As set out in the preceding sections, with the exception of a CAC/CARC component, the ICRC's approach has generally mirrored that adopted by other Australian regulators.

With the exception of the CAC/CARC component, we are also not in a position to recommend modifications to the general approach adopted by the ICRC. As a general matter, particularly where the earlier regulatory determinations are concerned (say, pre 2007), the determinations do not describe the approach that has been adopted in a great deal of detail, nor do they necessarily provide figures for individual (rather than aggregate) cost items. It is therefore difficult to make detailed comparisons between regulatory determinations.

Table 2.4

COST COMPARISON

		ACT	NSW*	Qld*	Tas	SA ^(*)	WA	Average
2007-08	WEC	\$70.70	\$67.36	\$49.00	N/A	\$78.20	N/A	\$66.32
	ROC	\$96.36	\$107.48	\$105.53	\$88.21	\$95.22	N/A	\$98.56
	Retail margin	4.0%	5.0%	5.0%	3.0%	5.0%	N/A	4.4%
2008-09	WEC	\$78.86	\$64.85	\$54.66	N/A	\$84.38	N/A	\$70.69
	ROC	\$98.74	\$107.48	\$108.42	\$90.50	\$94.25	N/A	\$99.88
	Retail margin	5.0%	5.0%	5.0%	3.0%	5.0%	N/A	5.0%
2009-10	WEC	\$75.84	\$65.91	\$61.20	N/A	\$88.01	\$121.58	\$82.51
	ROC	\$103.01	\$107.48	\$109.70	\$93.03	\$90.36	N/A	\$100.73
	Retail margin	5.0%	5.0%	5.0%	3.0%	5.0%	3.0%	4.3%
2010-11	WEC	\$69.10	\$77.56	\$65.17	N/A	\$89.84	\$158.51	\$92.04
	ROC	\$104.90	\$107.48	\$126.40	N/A	\$88.46	N/A	\$106.81
	Retail margin	5.4%	5.4%	5.0%	3.0%	5.0%	3.0%	4.5%

Notes: * Includes CAC/CARC component.
 (*) Includes 'headroom' (not defined).
 All figures are in dollars of the day.
 WEC is stated on a per MWh basis, ROC is stated on a per customer, per annum basis.
 The WEC for Tasmania is not stated because it is fixed under a vesting contract.
 The South Australian retail margin is adjusted from 10 per cent of controllable costs (WEC+ROC). ESCOSA states in its most recent determination that a 1:2 conversion rate from a margin on total costs as opposed to a margin on controllable costs is appropriate (ESCOSA 2007).
 Western Australia does not currently have FRC.
 Information for Victorian regulated tariffs is not available in the public domain.

Source: Allen Consulting Group calculations.

Where specific cost components are concerned, it is clear that the WEC element has always been calculated for specific regional and load factors. Given that the ACT is likely to differ somewhat from other jurisdictions, for instance in terms of seasonality and load shape, we would have no basis for recommending an alternative approach. As noted above, regulators have also applied different approaches for calculating WEC, reflecting their terms of reference. The ACT WEC is slightly higher than average for 2007-08 and 2008-09, but slightly below average in 2009-10 and 2010-11.

Where the ROC element is concerned, with few exceptions, the approach that has typically been used (including in the ACT) is to assess the incumbent retailer's or retailers' costs, and to compare this with estimates made in other regulatory determinations. This suggests an inherent circularity of approach across jurisdictions. ActewAGL Retail's allowed ROC is below average in all but one year, which may reflect a number of factors, including that no provision is made for a CAC/CARC component (see below).

In regards to the retail margin, similar arguments apply as for WEC and ROC. In the majority of cases (including in the ACT), retail margins have been set on the basis of what was deemed appropriate elsewhere. All states except Tasmania and Western Australia have used a margin upwards of 5 per cent in most years.

Overall, there is little basis to recommend a different approach to that used by the ICRC. The ICRC's approach is broadly in line with that used in other jurisdictions. The ICRC's cost estimates are also broadly consistent with those derived in other jurisdictions.

The one exception is the CAC/CARC component within ROC, which is applied in Queensland and New South Wales, and, although not explicitly, in South Australia. The ICRC has not included these costs in ActewAGL Retail's allowed costs, given that its terms of reference emphasise efficiency and customer protection objectives to a greater extent than competition objectives.

In its final decision in 2010 the ICRC compared the ROC in the ACT to that in other jurisdictions, taking into account economies of scale, and excluding CAC/CARC where applicable (see Table 2.5). This was in response to a submission from ActewAGL that suggested economies of scale should be taken into account when comparing ROC across jurisdictions. The ICRC found that its ROC is broadly in line with that used in other jurisdictions (ICRC 2010d). This favourable comparison was then used (in part) to justify not including CAC/CARC in its decision, because the ROC was already similar to that used in other jurisdictions. This argument seems flawed since the ICRC's ROC is significantly below the ROC+CARC figure used by other regulators when economies of scale are taken into account, and it is the ROC+CARC figure that determines the revenue cap in jurisdictions that add CARC, not the ROC alone.

As a result, the only modifications to the ICRC's approach that can be justified would be to include a CAC/CARC component. This is true especially since the ICRC's ROC component is broadly in line with other regulators' ROC *excluding* CAC/CARC when economies of scale are taken into account, but is significantly lower when CAC/CARC is included.

Table 2.5

COMPARISON OF ROC (PER CUSTOMER) ADJUSTED FOR ECONOMIES OF SCALE

Jurisdiction	Total	CARC	ROC	ROC adjusted for economies of scale for 150,000 customers
Queensland – QCA	\$126.40	\$44.20	\$85.42	\$112.00
New South Wales – IPART	\$109.80	\$36.80	\$75.30	\$101.00
South Australia – ESCOSA	\$91.00	N/A	\$91.00	\$120.00
Tasmania – OTTER	\$93.00	Nil	\$93.00	\$107.00
ACT – ICRC	\$104.90	Nil	\$104.90	\$104.90

Source: ICRC (2010d, p40)

2.4 Recalculation of costs for the ACT

The following describes our calculations to calculate the effective retail margin that a retailer competing with ActewAGL Retail would earn, assuming that the retailer would price at the same level and have the same costs as ActewAGL Retail, but would additionally incur customer acquisition costs to attract new customers.

2.4.1 Customer acquisition cost ranges

New South Wales and Queensland are the only two states to specify the amount of CAC/CARC to be included in their ROC (Table 2.6). Information for the CAC component included in Victorian determinations is available from secondary sources, but it is not clear that these estimates were eventually adopted, so we have not included them in this analysis.

Table 2.6

CAC/CARC ESTIMATES BY JURISDICTIONAL REGULATORS

Jurisdiction	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
NSW	\$0.0	\$37.2	\$37.2	\$37.2	\$36.3	\$36.3	\$36.3
Queensland	\$2.1	\$29.2	\$27.1	\$26.1	\$39.76	N/A	N/A

Notes: All figures in June 2009 dollars.

On this basis of the above figures, we have determined a low, intermediate and high value for the CAC/CARC to be included in recalculated tariffs for the ACT (in June 2009 \$) of:

- \$26 per customer, per year;
- \$36 per customer, per year; and
- \$42 per customer, per year.

In the context of the decisions made by the ICRC (where all prices are expressed per MWh), this translates to increases of \$2.62, \$3.62 and \$4.23 per MWh, respectively⁷.

2.4.2 Restatement of ActewAGL Retail's costs and tariffs

We used the above CAC/CARC estimates to recalculate ActewAGL Retail's costs and tariffs from 2007-08 to 2010-11, by including these in the ROC component of costs. We have only recalculated tariffs for these years because these are the only years for which detailed cost estimates are available. The ICRC did not provide a breakdown of costs in its 2003 and 2006 reviews, and estimates for the period after 2010-11 have not yet been determined.

⁷ Where \$/customer is converted to \$/MWh, an exchange rate of 9.93 MWh/customer is used, consistent with the figure the ICRC seems to use in its 2010 final decision (ICRC 2010d, p38).

Table 2.7

RESTATEMENT OF ACTEWAGL RETAIL'S COSTS AND TARIFFS

	2007-08	2008-09	2009-10	2010-11
TFT prices	\$/MWh	\$/MWh	\$/MWh	\$/MWh
TFT prices, as determined by ICRC for ActewAGL Retail	138.96 ^(*)	152.10	160.37 ^(**)	159.26
of which:				
Regulated retail margin	5.34	7.24	7.64	8.16
Calculated CAC/CARC allowance				
Low CAC/CARC	2.45	2.50	2.62	2.66
Intermediate CAC/CARC	3.39	3.47	3.62	3.69
High CAC/CARC	3.95	4.04	4.23	4.30
Adjusted TFT retail price, incl. CAC/CARC allowance				
Low CAC/CARC	141.50	154.74	163.11	162.07
Intermediate CAC/CARC	142.48	155.75	164.17	163.15
High CAC/CARC	143.07	156.35	164.81	163.80
Retail margins				
Regulated retail margin as determined by ICRC for ActewAGL Retail	4.00%	5.00%	5.00%	5.40%
Effective retail margins				
Low CAC/CARC	2.07%	3.11%	3.15%	3.48%
Intermediate CAC/CARC	1.34%	2.41%	2.45%	2.77%
High CAC/CARC	0.91%	1.99%	2.04%	2.34%

Notes: All \$ are in money of the day.

CAC/CARC components have been adjusted for inflation and converted to a \$/MWh basis.

(*) The ICRC's published TFT retail figure for 2007-08 is \$137.63, which implies a retail margin of 3 per cent. We have recalculated this figure to be consistent with a 4 per cent retail margin, as stated in the ICRC determination.

(**) This is the original figure from the 2009-10 decision.

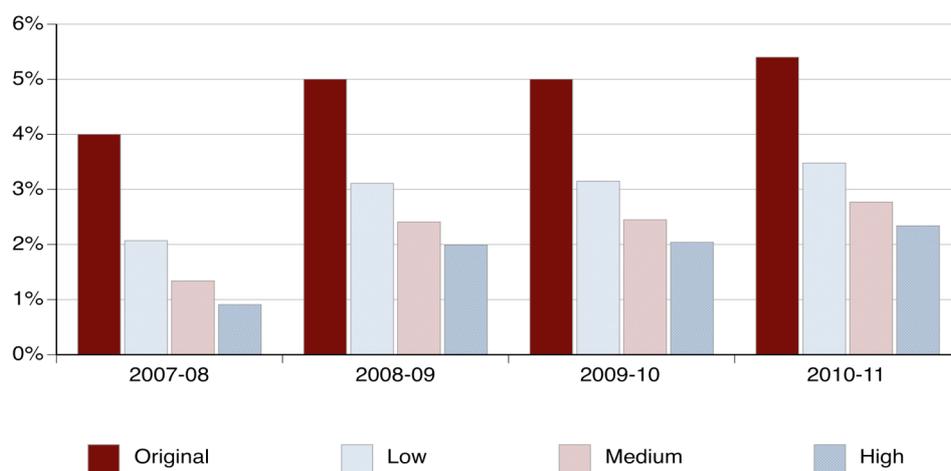
Effective retail margins calculated using the 'goal seek' function in Excel, solving for the retail margin.

Source: Allen Consulting Group calculations.

The figures in Table 2.7 were derived as follows. For each year, we have taken the total TFT retail tariff, as determined by the ICRC, and added a CAC/CARC allowance for the low, medium and high case. On this basis we have derived the 'adjusted' TFT retail price. To derive the effective retail margin, we have then solved for that retail margin, which would equalise the (original) TFT price, as determined by the ICRC for each year with the adjusted TFT retail price. In 2010-11, for instance, the ICRC determined that the regulated TFT price would be \$159.26/MWh, which included a retail margin component of \$8.16/MWh (corresponding to a retail margin of 5.4 per cent). Including a 'low' CAC/CARC allowance of \$2.66/MWh increases the TFT to \$162.07/MWh. Solving for that retail margin, which would set the \$162.07/MWh equal to \$159.26/MWh (the original TFT price determined by the ICRC), yields an effective retail margin of 3.48 per cent.

The results in Table 2.7 (graphed in Figure 2.1 below) suggest that the effect of including a CAC/CARC component on effective retail margins is significant. For instance, the effective retail margin in 2007-08 was only 0.91 per cent, instead of the 4.00 per cent used in the determination, if a high CAC/CARC estimate is used. The differences in later years are less dramatic, but the effective retail margin is still significantly below that used in other jurisdictions, and may be too low to make it attractive either for new retailers to enter the market, or for existing retailers to expand by making market offers at a discount to ActewAGL Retail's TFT.

Figure 2.1

EFFECTIVE RETAIL MARGINS WITH THE INCLUSION OF CAC/CARC

Source: Allen Consulting Group estimates.

Chapter 3

Retail competition

This chapter considers market tariffs charged by active retailers in the ACT, and compares them to the regulated tariff charged by ActewAGL Retail. We have also considered discounts offered by retailers. This information is used to assess the level of competition in the ACT electricity retail market, and the attractiveness of entry and expansion in that market.

3.1 Comparison of market prices and the regulated price

We reviewed the websites of all licensed retailers and determined, first, whether they were active in the ACT small customer market, and if they were, what prices they offered. In addition, we searched relevant news items that may have been posted in the press, and considered all submissions to the current AEMC review and to the various ICRC reviews.

Only four licensed retailers seem to be actively participating in the market: ActewAGL Retail, TRUenergy, EnergyAustralia and Country Energy (ICRC 2009f). The latter two still supply electricity to existing customers, but no longer accept new customers (AER 2009). ActewAGL Retail and TRUenergy are both active, with their offers listed in Table 3.1 below. In its submission to the AEMC review, the Australian Capital Territory Civil and Administrative Tribunal (ACAT) noted that TRUenergy no longer engages in active marketing in the ACT (ACAT 2010, p 3).

The differences between the charges by ActewAGL Retail and TRUenergy are fairly small, and which plan would be optimal would depend on a household's usage patterns:

- ActewAGL Retail offers a variety of tariffs under the TFT. The tariffs offered by ActewAGL Retail include a flat rate, two rates based on the level of consumption, and a peak/off-peak rate. Essentially customers can trade off a higher supply charge ($\text{¢}/\text{day}$) against a lower base rate ($\text{¢}/\text{kWh}$) or vice versa.
- TRUenergy offers two nearly identically priced products, which differ only in the off-peak rates and the types of discounts that are offered, and in whether there are exit fees. TRUenergy's supply charges are higher than those under ActewAGL Retail's 'Always Home' plan, but lower than supply charges under ActewAGL Retail's other plans. TRUenergy's base rate is slightly lower than that under ActewAGL Retail's 'SmartSaver' and standard plans (and higher than for ActewAGL Retail's other plans). TRUenergy's off-peak charges are always lower than ActewAGL Retail's charges.

Table 3.1

CURRENT RETAIL PRICE OFFERS IN THE ACT

Retailer	Supply charge (¢ per day)	Base rate (¢/kWh)	Other rate (¢/kWh)
ActewAGL Retail*			
Always Home@ActewAGL plan (standard)	53.90	15.598	N/A
Always Home@ActewAGL Saver plan	77.55	13.860 (first 60 kWh per day)	15.598 (thereafter)
Always Home@ActewAGL Saver plus plan	124.85	12.210 (first 165 kWh per day)	15.598 (thereafter)
Always Home@ActewAGL SmartSaver plan	53.90	19.690 (peak)	14.465 (shoulder) 10.736 (off-peak)
TRUenergy			
Go Easy**	58.55	15.4 peak	10.07 off-peak
Go for More***	58.55	15.4 peak	8.393 off-peak
EnergyAustralia	Identical to ActewAGL Retail. Not currently taking new customers.		
Country Energy	Prices unknown. Not currently taking new customers.		

Notes: All figures include GST.

* ActewAGL Retail offers a 5.5 cent per day discount on the supply charge for customers in a direct debit arrangement (discount not valid in combination with other offers).

** The 'Go Easy' option has no exit fees, and customers are given a 3% discount for paying the bill by the due date.

*** The 'Go for More' option has exit fees, customers are given a 3% discount for paying the bill by the due date, and customers are given a 3% discount against usage and supply charges.

Source: ActewAGL Retail website, switchwise.com.au (for TRUenergy), energyaustralia.com.au, AER (2009).

To summarise, ActewAGL Retail and TRUenergy's basic service offerings are very similar, both in terms of tariff structure and level, so that there is relatively little evidence that the two retailers that are active in the ACT are competing on the basis of innovative tariffs or other service offerings.

Green energy

The offers listed in Table 3.1 do not include green energy offers. ActewAGL Retail offers green energy both on fixed usage plans (a certain amount of green energy per day, with the balance of use coming from traditional energy sources) and on a percentage of usage basis. This also allows customers to buy more than their actual usage in green energy (e.g. they can offset 200 per cent of their emissions). TRUenergy offers 10 per cent green energy for free with one of its packages. It is possible to have up to 100 per cent of energy use as green energy for an additional annual fee.

Discounts

Both ActewAGL Retail and TRUenergy offer some discounts off their standard prices. ActewAGL Retail offers a 5.5 cent per day discount for customers on a direct debit agreement. TRUenergy offers a 3 per cent discount for consumers entering into a three year contract, and a further 3 per cent discount for consumer who pay their bill by the due date. These discounts cannot be used in combination with any other offers/discounts.

In addition, ActewAGL Retail offers a bundling discount for customers who bundle three or more ActewAGL or TransACT services. TransACT, a telecommunications service provider, has been managed by ActewAGL since 2004, and Actew Corporation Limited (ACTEW) has an 18 per cent shareholding in this business. ACTEW is also a 50 per cent shareholder in ActewAGL, which provides water, wastewater, and natural gas services, in addition to electricity (Actew Corporation 2010).

Electricity and a landline account are compulsory services to receive the bundling discount from ActewAGL (ActewAGL 2010). Natural gas is also compulsory in the bundle for those consumers who already have a natural gas connection. Optional services include mobile, broadband, internet, subscription TV and green energy. The bundling discount ranges from 3 per cent if three services have been bundled to 25 per cent for a bundle of seven services, up to a total of \$500. Customers can choose to take this as a discount off their total electricity bill, or as a discount off their TransACT services (all services except electricity, natural gas). In addition customers bundling five or more services receive a privileges card that provides discounts around Canberra.

3.2 Other evidence relating to the level of competitive activity

Currently only two retailers appear to be active in the ACT electricity market (with a further two supplying only to existing customers). This suggests that the level of competitive activity between retailers is currently low in the ACT. The recent Draft Decision on retail prices for non-contestable electricity customers from the ICRC (ICRC 2010c) has also noted the lack of price competition in the market, and the fact that ActewAGL is still the largest retailer by far.

3.2.1 Numbers of competing retailers

The ICRC (2010c) has noted that the number of licensed retailers has remained fairly constant over the last few years at around 18. However, for the past three years only 12 licensed retailers have served customers in the ACT, and to date only 7 retailers have more than 100 customers (Table 3.2).

Table 3.2

NUMBER OF SUPPLIERS BY CUSTOMER NUMBER CATEGORIES, ELECTRICITY SUPPLY, ACT, 2004-05 TO 2008-09

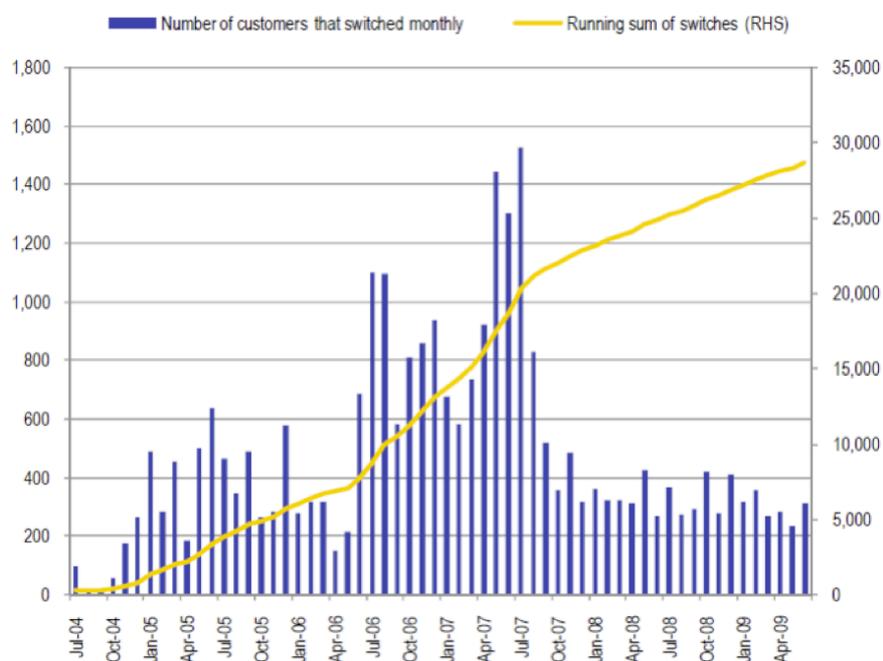
Retailer	Supply charge (¢per day)	Base rate (¢/kWh, incl GST)	Other rate (¢/kWh)		
	2004-05	2005-06	2006-07	2007-08	2008-09
Number of customers	2004-05	2005-06	2006-07	2007-08	2008-09
Less than 10	6	8	3	5	3
10 to 50	2	2	2	2	2
51 to 100	0	1	0	0	0
More than 100	4	4	7	5	7

Source: ICRC 2010c, P 46.

3.2.2 Customer switching

The ICRC (2010c) notes that there has been a noticeable reduction in the number of customers moving retailers since mid-2007 (Figure 3.1). The figure below shows switching between retailers, but does not show the number of ActewAGL Retail customers who have switched from the TFT to a negotiated contract.

Figure 3.1

NUMBER OF CUSTOMERS SWITCHING RETAILERS 2004 TO 2009

Source: ICRC 2010c, P 46.

As of 30 June 2009 19.1 per cent of small retail customers were on negotiated contracts in the ACT, a reduction from 23.7 per cent in June 2007 (ICRC 2010c, p47). This includes customers on a negotiated contract with ActewAGL Retail (e.g. via a bundling arrangement), as well as with other retailers. It is unclear which percentage of these customers is with retailers other than ActewAGL Retail, so the above figure is not necessarily a good measure of the level of retail competition. The percentage of consumers on negotiated contracts does not compare well to that in other states. In March 2009, 44.3 per cent of small customers in Queensland were on negotiated contracts; in June 2008 54 per cent and 69 per cent of small customers were on negotiated contracts in Victoria and South Australia, respectively.

3.2.3 Effect of high wholesale market prices

There is anecdotal evidence to suggest that the decline in competitive activity in the ACT electricity retail market coincided with a period of high prices in New South Wales/the ACT, particularly in 2006-07 and 2007-08. At least in part, high prices and attendant market volatility reflected the impacts of the recent drought on power station operations across the NEM (Table 3.3, Figure 3.2). The extent to which NEM retailers, including those who were active in the ACT, were hedged against high prices is not known.

Table 3.3

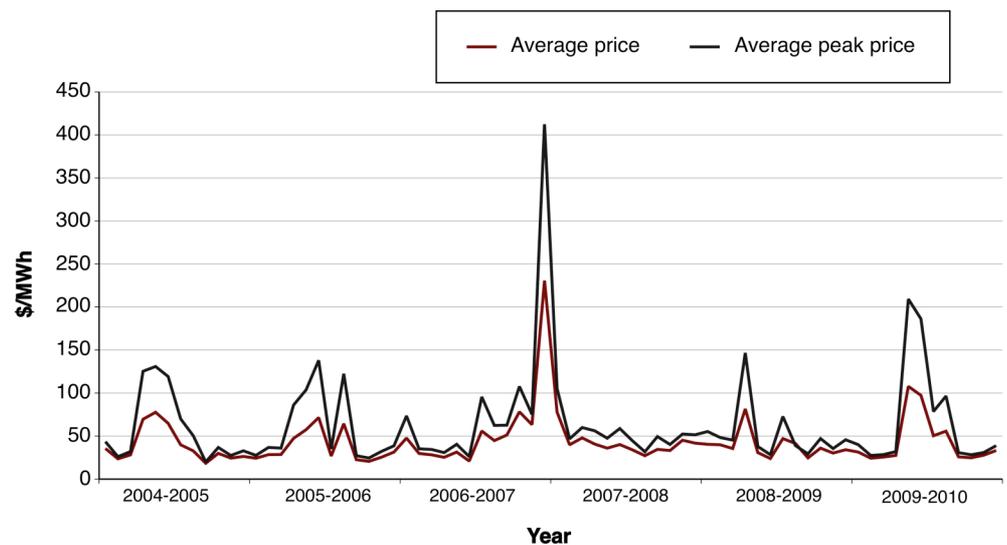
NUMBER OF HOURS WHEN HIGH SPOT PRICES OCCURRED ACROSS NEM REGIONS (COUNT)

		2004-05	2005-06	2006-07	2007-08	2008-09
NSW	>\$100/MWh	77.5	123	635	206	117
	>\$300/MWh	46	35	94.5	22	18.5
	>\$1,000/MWh	21	18	23	2.5	12
QLD	>\$100/MWh	61	88.5	581.5	276	111
	>\$300/MWh	21	20.5	66	38.5	17.5
	>\$1,000/MWh	12	12	23	28.5	11
SA	>\$100/MWh	141	207	547	364.5	146
	>\$300/MWh	14	40.5	35.5	49.5	33
	>\$1,000/MWh	9.5	18	13.5	31	22.5
VIC	>\$100/MWh	31.5	119	509	336	110.5
	>\$300/MWh	7.5	29.5	53	27.5	17
	>\$1,000/MWh	5	15	22	8	13.5
TAS	>\$100/MWh	45	782.5	350.5	423.5	353
	>\$300/MWh	2.5	29.5	17.5	8	51
	>\$1,000/MWh	0.5	16	8	3	31.5

Source: AEMO 2009.

It is plausible that the decline in competitive activity in the ACT electricity retail market at this time was due in part to the wholesale price spike. During this time, negotiated contracts with retail customers in the ACT may not have been competitive with the terms of ActewAGL Retail's (regulated) TFT tariffs. It may also be the case that, given the relatively high cost of supplying customers during this period, other retailers scaled back their marketing activities to win new customers. However, given the paucity of information in the public domain about historical market offers and the motives of ACT electricity retailers it is impossible to be sure⁸.

Figure 3.2

AVERAGE WHOLESALE PRICES

Note: Peak prices are recorded between 7am and 10pm EST on weekdays, excluding NEM holidays.

Source: AEMO average price tables, accessed at

www.aemo.com.au/data/avg_price/averageprice_main.shtml

In addition, and as discussed above, the bundling discounts offered by ActewAGL Retail and its affiliate TransACT do not appear to be offered by other retailers. Stand-alone retailers looking to enter the ACT electricity retail market and/or to expand their customer base may not be able to match such discounts. The fact that such retailers would, in effect, be at a disadvantage in terms of the prices they could offer customers would be expected to reduce the attractiveness of the ACT electricity retail market to potential entrants.

⁸ We expect that retailer interviews commissioned by the AEMC for its review of competition in the ACT electricity retail market may shed more light on this issue.

Chapter 4

Conclusion

The analysis we have undertaken in this report suggests that entry and expansion in the ACT electricity retail market has not been commercially attractive to competing retailers since 2007/08, and that this will continue to be the case going forward:

- The retail margin that a competing retailer could earn if it priced its offers to match or undercut the TFT (ActewAGL Retail's regulated tariff) is limited;
- Taking into account that a competing (entrant) retailer would need to incur marketing and other customer acquisition costs to attract new customers (for which no provisions are made in the determination of the TFT), the effective retail margin would be (significantly) lower than what is generally considered reasonable in electricity retailing;
- Competing retailers have not been able to match ActewAGL Retail's ability to offer bundles of utility services; and
- Competing retailers would have difficulties matching the multi-service (bundling) discounts that ActewAGL Retail offers electricity customers, which also purchase telecommunications services from its affiliate.

The conclusion that entry and expansion in the ACT electricity retail market is not attractive is consistent with other indicators that have also been identified by the ICRC, which suggest that competition in that market is weak:

- While a number of (interstate) retailers hold electricity retail licenses for the ACT, there has been very limited actual entry in that market, in the sense that few retailers actively began marketing to win new customers;
- It appears that two of the three entrant retailers who did enter the ACT electricity retail market no longer offer market contracts to new customers and only service existing customers;
- The incumbent ActewAGL Retail remains the dominant retailer in the ACT;
- There is little indication of price competition or of innovative tariff structures for retail electricity; and
- Compared to other jurisdictions, rates of customers switching between retailers are low.

This conclusion is also broadly accepted by the ICRC in its most recent determination (ICRC 2010d). It is possible that other factors, such as high (drought-related) spot prices in the NEM, contributed to this outcome. If competing retailers were not fully hedged against these high prices, market offers may not have been competitive relative to ActewAGL Retail's regulated tariffs or competing retailers may have scaled back their marketing activities. The possible effect of high prices in the NEM on retail competition is consistent with the observation that while there was some entry into the ACT retail market when FRC was first introduced, competitive activity declined after 2007.

Overall, however, our conclusion is that as a result of the relatively low retail margins that the ICRC's tariff determinations imply for competing retailers and ActewAGL Retail's ability to offer discounted bundles of utility services, entry and expansion in the ACT electricity retail market would have been unattractive from 2007 onwards, and that this remains the case today.

Appendix A

ActewAGL's regulated tariffs

This appendix sets out the methodology used by the ICRC to set regulated tariffs. In broad terms, the ICRC determines by how much the TFT is allowed to increase, based on its analysis of cost and other factors that would affect the retail price. The methodology is discussed for each review the ICRC has undertaken, though for later years only changes in methodology are noted.

A.1 ICRC's terms of reference

With the exception of those issued to the ICRC for its most recent determination, the ICRC's terms of reference have not changed since 2003. However, all of the ICRC's determination must be consistent with section 20 of the ICRC Act.

Section 20 criteria

Section 20 of the ICRC Act provides a list of issues that the ICRC must address in determining weighted average price caps.

Section 20 states that:

- (1) At the conclusion of an investigation on a reference authorising the commission to make a price direction in a regulated industry, the commission must decide on the level of prices for services in relation to the period specified in the reference and give a price direction accordingly to each person providing regulated services.
- (2) In making a decision under subsection (1), the commission must have regard to—
 - (a) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies (including policies relating to the level or structure of prices for services) and standard of regulated services; and
 - (b) standards of quality, reliability and safety of the regulated services; and
 - (c) the need for greater efficiency in the provision of regulated services to reduce costs to consumers and taxpayers; and
 - (d) an appropriate rate of return on any investment in the regulated industry; and
 - (e) the cost of providing the regulated services; and
 - (f) the principles of ecologically sustainable development mentioned in subsection (5);
 - (g) the social impacts of the decision; and
 - (h) considerations of demand management and least cost planning; and
 - (i) the borrowing, capital and cash flow requirements of people providing regulated services and the need to renew or increase relevant assets in the regulated industry; and
 - (j) the effect on general price inflation over the medium term; and
 - (k) any arrangements that a person providing regulated services has entered into for the exercise of its functions by some other person.

(3) Also, in making a decision under subsection (1), the commission must allow a declared fee under section 4C (Declared fees to be passed on to consumers) to be passed on in full to consumers of the service.

(4) In a price direction, the commission must indicate to what extent it has had regard to the matters referred to in subsection (2).

(5) For subsection (2) (f), ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes through the implementation of the following principles:

(a) the precautionary principle—that if there is a threat of serious or irreversible environmental damage, a lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;

(b) the inter-generational equity principle—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

(c) conservation of biological diversity and ecological integrity;

(d) improved valuation and pricing of environmental resources.

In its most recent determination (ICRC 2010c), the ICRC particularly highlights the importance of:

- Ensuring that retail services are delivered in a reasonably efficient manner to reduce the costs paid by consumers (s. 20(2)(c));
- Preventing the exploitation of monopoly power, which might otherwise raise costs for consumers (s. 20(2)(a));
- Referencing these costs to those incurred by ActewAGL Retail (s. 20(2)(e)); and
- Allowing for an appropriate rate of return (s. 20(2)(d)) and a financially viable outcome for the service provider (s. 20(2)(i)).

ICRC 2010 determination

As was the case for all earlier determinations, the ICRC's 2010 determination also refers to s. 20 of the Act. However, the terms of reference for this determination include a number of additional requirements that mandate the Commission to:

- Investigate the price level that would result in vigorous competition in the market;
- Review the modelling of electricity costs;
- Have regard to ActewAGL Retail's costs of complying with relevant Australian Government and Territory policies; and
- Have regard to the AEMC Review of Energy Markets in light of Climate Change Policies.

A.2 ICRC 2003 review

The ICRC (2003) based its estimates on ActewAGL's costs on the efficient benchmark costs of electricity supply to TFT customers. In the ICRC's 2003 review of ActewAGL's regulated retail tariffs (Table A.1), retail cost components were determined as follows:

- WEC, comprising the costs of purchasing spot and contract energy in the NEM, including a hedging mismatch cost component, an additional market risk component, NEMMCO fees and ancillary service charges, allowances for renewable energy costs, and network losses;
- ROC, comprising customer care and call centre operations, billing and charging, sales and marketing, collection and default, administration, and retail activities related to full retail contestability; and
- A retail margin calculated as percentage of sales;

Table A.1

COST COMPONENTS FOR 2003 (WHERE STATED)

Cost component	Cost
Network charges	Based on regulated TUoS and DUoS charges used for setting 2002/03 rates.
Wholesale energy costs	Based on an assessment of contracting costs to match ActewAGL's load, based on: <ul style="list-style-type: none"> • A forward contracting curve for a combination of contracts • Seasonal load variations Other cost components included are: <ul style="list-style-type: none"> • Hedge mismatch component to cover unexpected changes in consumer demand • A risk premium to cover the risk of customer churn, wholesale credit risks, and force majeure risks • NEMMCO fees and ancillary charges • MRET costs • Transmission and distribution losses
Retail operating costs	\$85 per customer to cover operating costs, including FRC costs
Customer acquisition costs	Not included
Retail margin	3% of sales

Source: ICRC 2003

Defined pass-through events are NEMMCO fees and charges, MRETS/greenhouse levies, network tariff variations, and other fees, taxes and imposts. The ICRC determined that price variation triggers would constitute:

- significant changes to obligations and/or costs under access arrangements, regulation or codes;
- significant and fundamental wholesale market adjustments affecting price, and relevant related pass-through costs allowances, such as demand forecast errors, insolvency of counter party, and ancillary services market; and
- significant changes to the obligations or costs associated with the ACT retailer of last resort (RoLR) arrangements or metrology procedures or policy.

A.3 ICRC 2006 review

In this review the ICRC argued in favour of abolishing the TFT, but still implemented a transitional tariff to allow legislation that allowed the abolishment of the TFT to pass. It did not conduct an extensive review of cost factors. Instead, it allowed the TFT to increase by the rate of inflation without review. If ActewAGL wanted to increase prices by more than inflation a review would ensue. Prices did not increase by more than CPI, so there was no detailed review of cost factors.

A.4 ICRC 2007 review

In its 2007 review the ICRC used three major cost components:

- WEC, comprising electricity purchasing costs, energy contracting costs, green costs, NEM fees and energy losses. Energy purchase costs are estimated using prices in the forward market, and hedging up to 105 per cent of forecast load over two years;
- ROC, comprising the same elements as in the 2003 review: customer care and call centre operations, billing and charging, sales and marketing, collection and default, administration, and retail activities related to full retail contestability. These were escalated from the 2003 estimate by using CPI. No separate estimate for customer acquisition costs is included;
- Network costs, comprising distribution network costs and transmission network costs.

Table A.2

COST COMPONENTS FOR 2007-08

Cost component	Cost (\$/MWh)
WEC	
Electricity purchase cost	62.60
Energy contracting cost	0.70
Green costs	3.34
NEM fees	0.71
Energy losses	4.79%
<i>Total WEC</i>	<i>70.70</i>
ROC	
Retail operating costs	9.70
Customer acquisition costs	Not included
Network costs	53.22
<i>Total retail costs</i>	<i>133.62</i>
Retail margin (% of sales, EBITDA)	4.00%
Total retail price	\$138.96^(*)

Note: ^(*)The figure published by the ICRC has erroneously been calculated using a 3 per cent retail margin. In the above table, this figure is adjusted.
All \$ are in money of the day.

Source: ICRC (2007b, p42)

A.5 ICRC 2008 review

The methodology used for the 2008 review remained largely unchanged. The only change was a clarification in the way the energy contracting cost was calculated – by increasing the previous year’s value by CPI.

Table A.3

COST COMPONENTS FOR 2008-09

Cost component	Cost (\$/MWh)
WEC	
Electricity purchase cost	68.90
Energy contracting cost	0.72
Green costs	4.87
NEM fees	0.72
Energy losses	4.86%
<i>Total WEC</i>	<i>78.86</i>
ROC	
Retail operating costs	9.94
Customer acquisition costs	Not included
Network costs	56.06
<i>Total retail costs</i>	<i>144.86</i>
Retail margin (% of sales, EBITDA)	5.00%
Total retail price	152.10

Notes: All \$ are in money of the day.

Source: ICRC (2008b, p50)

A.6 ICRC 2009 review

The ICRC made some minor changes to energy purchase costs. The percentage of load hedged was increased from 105 per cent to 117 per cent. The method for calculating NEM fees was changed from relying on IPART data to increasing the previous year’s amount by CPI. Network costs are now explicitly based on regulated prices set by the AER.

Table A.4

COST COMPONENTS FOR 2009-10

Cost component	Cost (\$/MWh)
WEC	
Electricity purchase cost	64.96
Energy contracting cost	0.75
Green costs	5.12
NEM fees	0.75
Energy losses	6.01%
<i>Total WEC</i>	<i>71.24</i>
ROC	
Retail operating costs	10.37
Customer acquisition costs	Not included
Network costs	66.52
<i>Total retail costs</i>	<i>148.13</i>
Retail margin (% of sales, EBITDA)	5.00%
Total retail price	155.54

Notes: All \$ are in money of the day.

Source: ICRC (2009c, p45)

A.7 ICRC 2010 review

The ICRC decided to review and change its methodology for this decision. Retailers argued in their submissions that CAC should be added to the TFT because the current TFT was too low to allow effective entry into the market – so the current TFT is not conducive to competition. The ICRC decided not to include the CAC despite the positive effect it would have on ‘competition’. The reasoning behind this is that adding CAC would only raise prices for consumers, because retailers were unlikely to discount prices below the current level of the TFT without the CAC. They had after all argued that the current TFT is too low to allow profitable entry. The ICRC decided that lower ‘regulated’ prices would be more beneficial to consumers than higher ‘competitive’ prices.

The ICRC made changes to the way it calculated the electricity purchase cost. Instead of calculating the cost of hedging up to 117 per cent of forecast load over a period of two years, it now uses the average forward price between 1 July 2008 and 31 May 2010 (effectively a two year period, but limited by data availability), and multiplies it by a ‘forward price uplift factor’. This uplift factor accounts for the load shape and hedging costs.

Another minor change is the increase of the retail margin to account for the results from research into this matter that was commissioned by IPART.

Table A.5

COST COMPONENTS FOR 2010-11

Cost component	Cost (\$/MWh)
WEC	
Electricity purchase cost	58.57
Energy contracting cost	0.76
Green costs	5.15
NEM fees	0.76
Energy losses	5.92%
<i>Total WEC</i>	<i>69.01</i>
ROC	
Retail operating costs	10.56
Customer acquisition costs	Not included
Network costs	71.44
<i>Total retail costs</i>	<i>151.01</i>
Retail margin (% of sales, EBITDA)	5.40%
Total retail price	159.16

Notes: All \$ are in money of the day.

Source: ICRC (2010d, p47)

A.8 Methodology

Table A.6 summarises the ICRC's methodology over time.

Table A.6

COST COMPONENTS FOR 2010

Cost component	Year	Method
WEC		
Electricity purchase cost	2003	Estimate provided by ActewAGL
	2007, 2008	Calculated using forward market data, based on portfolio build-up over 2 years up to 105% of expected load.
	2009	Same, but build up to 117% of expected load.
	2010	New method. The cost is determined by multiplying the average forward price between 1 July 2008 and 31 March 2010 by a 'forward price uplift factor' consisting of a measure for the load shape and hedging costs. (Details page 28-32 of Draft Decision)
Energy contracting cost (risk management costs)	2003	Unknown
	2007	Unknown ("The commission has canvassed market information")
	2008, 2009, 2010	Increased previous year's value by assumed CPI
Green costs	2003	Based on ActewAGL's anticipated MRET pass-through
	2007, 2008, 2009, 2010	Based on ActewAGL's estimates, which are calculated using a methodology mandated by the Commonwealth Government.
NEM fees	2003	Based on 2002 costs (most recent available data)
	2007, 2008	Based on IPART data in the absence of information from ActewAGL
	2009, 2010	Increased previous year's value by assumed CPI
Energy losses	2003	Estimate provided by ActewAGL
	2007, 2008	Data from NEMMCo used (distribution losses only)
	2009, 2010	Use of a combination of transmission and distribution losses, with data from the AEMO. Total losses = $(1 + \text{transmission loss}) \times (1 + \text{distribution loss}) - 1$
ROC		
Retail Operating Cost	2003	Based on ActewAGL estimate and benchmarked to other regulators' decisions
	2007, 2008, 2009, 2010	Increased previous year's value by assumed CPI
Network costs	2003	Used 2002/03 regulated network tariffs, plus an allowance for competitive metering services. Methodology for calculating allowance unknown
	2007, 2008	Estimate provided by ActewAGL and verified by ICRC based on regulated network tariffs and information in a confidential submission from ActewAGL
	2009, 2010	Based on regulated prices set by the AER
Margin		
Retail margin	2003, 2007, 2008, 2009	Benchmarked against other regulators' decisions
	2010	Increased to the level used by IPART based on a consultant's report prepared for the IPART decision

Source: ICRC Final Decisions 2003, 2007, 2008, 2009 and Draft Decision 2010.

*Appendix B***Jurisdictional determinations of regulated electricity retail prices**

This Appendix sets out the determinations for regulated electricity prices from other jurisdictions we have reviewed.

B.1 Overview of decisions reviewed

Table B.1

OVERVIEW OF DETERMINATIONS FOR REGULATED ELECTRICITY PRICES

Regulator/jurisdiction	Year
Victoria	
Allen Consulting Group, 2008. "South Australian Gas Standing Contract Prices – Price Path Review and Inquiry, Benchmarking analysis", March.	2003, 2004-07
New South Wales	
Independent Pricing And Regulatory Tribunal of New South Wales , 2002. "Mid-term review of regulated retail prices for electricity to 2004", Report and Determination to the Minister for Energy, June.	2002
Independent Pricing And Regulatory Tribunal of New South Wales, 2004. "NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07", Final Report and Determination, June.	2004
Independent Pricing and Regulatory Tribunal, 2007. "Promoting retail competition and investment in the NSW electricity industry, Regulated electricity retail tariffs and charges for small customers 2007 to 2010", Electricity—Final Report and Determination Det07-01, June.	2007
Independent Pricing and Regulatory Tribunal, 2010. "Review of regulated retail tariffs and charges for electricity 2010-2013", Electricity — Final Report, March.	2010
South Australia	
Essential Services Commission of South Australia, 2003. "2004 Electricity Standing Contract Price Final Report", December.	2003
Essential Services Commission of South Australia, 2004. "Electricity Standing Contract Price, Price Determination", December.	2004
Essential Services Commission of South Australia, 2005. "Inquiry into Retail Electricity Price Path, Final Report", March.	2005
Essential Services Commission of South Australia, 2007. "2007 Review of Retail Electricity Price Path Final Inquiry Report & Price Determination (Public Version)", November.	2007
Western Australia	
Office of Energy, 2009. "Electricity Retail Market Review, Final Recommendations Report", Review of Electricity Tariff Arrangements, Office of Energy Report to the Minister for Energy, January.	2009
Queensland	
Queensland Competition Authority, 2007. "Final Decision, Advice to the Minister for Mines and Energy, Benchmark Retail Cost Index for Electricity: 2006-07 and 2007-08", June.	2007
Queensland Competition Authority, 2008. "Final Decision Benchmark Retail Cost Index for Electricity: 2008-09, May.	2008
Queensland Competition Authority, 2009. "Remade Final Decision, 2008-09 Benchmark Retail Cost Index", June.	

Regulator/jurisdiction	Year
Queensland Competition Authority, 2009. "Final Decision, 2009-10 Benchmark Retail Cost Index", June.	2009
Tasmania	
Office of the Tasmanian Energy Regulator, 2003. "Investigation of Prices for Electricity Distribution Services and Retail Tariffs on Mainland Tasmania", Final Report and Proposed Maximum Prices, September.	2003
Office of the Tasmanian Energy Regulator, 2006. "Determination Of Maximum Prices for Electricity Retailing To Tariff Customers On Mainland Tasmania For 2007", 8 December.	2006

B.2 New South Wales

IPART modified its approach to determining the components of regulated retail prices in subsequent determinations:

- In its 2002 and 2004 determinations, IPART determined target tariffs on the basis of benchmark costs that reflect the 'efficient cost to the standard retailers of serving customers' (IPART, 2004). IPART therefore did not seek to set tariffs that would be 'neutral' with respect to competition, and did not include CAC.
- In its 2007 determination, IPART's terms of reference required it to assess the costs of a 'hypothetical retailer', 'taking into account the retail operating costs and margin of a mass market new entrant' (IPART 2007). Hence provision was made for CAC. IPART also changed its approach for calculating wholesale energy costs to calculating 'market-based' costs, rather than focusing on LRMC estimates.
- In its 2009 determination, IPART's terms of reference required it to use an approach that results in prices that recover an efficient Standard Retailer's costs in meeting the forecast demand for the regulated customers it is obliged to serve, including energy purchase costs, retailer operating costs and a retail margin. They also require us to make decisions that are consistent with the Government's policy aim of reducing customers' reliance on regulated prices and to maintain the aims and approach of the 2007 determination.

Table B.2

COMPONENTS OF REGULATED PRICE CONTROLS

Cost component	Approach taken
IPART 2002	
WEC	Electricity purchases based on the LRMC of electricity generation, including: <ul style="list-style-type: none"> • State and Commonwealth requirements on retail suppliers to purchase 'green' energy (MRET, GGAS) • Energy losses as determined by NEMMCO • NEMMCO fees • NEMMCO charge for ancillary services
ROC	Based on reviews of retailer costs and benchmarking, including FRC costs
CAC	Not included in retail operating costs
Retail margin	Percentage of sales, based on risk analysis, given: <ul style="list-style-type: none"> • Electricity Tariff Equalisation Fund (ETEF) arrangements • Competition/switching objectives
IPART 2004	
WEC	Electricity purchases based on the LRMC of electricity generation, given demand characteristics of customers remaining on regulated tariffs, including: <ul style="list-style-type: none"> • Cost of compliance with MRET and GGAS schemes • Energy losses by distribution area as determined by NEMMCO • NEMMCO fees • NEMMCO charge for ancillary services
ROC	Based on reviews of retailers' reasonable operating costs and benchmarking, including FRC costs
CAC	Not included in retail operating costs
Retail margin	Based on risk analysis, given: <ul style="list-style-type: none"> • ETEF arrangements • Competition/switching objectives
IPART 2007	
WEC	Based on market-based cost of electricity purchases, taking into account energy market risks, including: <ul style="list-style-type: none"> • Cost of compliance with MRET, GGAS, NRET schemes • Energy losses by distribution area as determined by NEMMCO • NEMMCO fees • NEMMCO charge for ancillary services • Volatility allowance to cover the cost of holding working capital to withstand electricity market system volatility
ROC	Based on bottom up analysis and benchmarking to reflect retail operating costs and retail margin of a mass market new entrant, rather than those of the standard retailers who supply regulated customers
CAC	Included in ROC
Double counting allowance (deduction)	Included in ROC to prevent double counting of CAC for some transfer processes
Retail margin	EBITDA margin for a mass market new entrant
IPART 2010	
WEC	The greater of the estimate of the LRMC of generation and market-based purchase cost, including: <ul style="list-style-type: none"> • An allowance for volatility

Cost component	Approach taken
	<ul style="list-style-type: none"> • Cost of compliance with MRET, CGAS, NRET schemes • NEM fees and ancillary services as determined by AEMO • Energy losses by distribution as published by AEMO
ROC	Based on historic cost data provided by Standard Retailers, information from other retailers and benchmarking
CARC	Estimate of the costs of retaining customers and winning customers to reflect a Standard Retailer's costs (rather than assuming that all customers need to be acquired). On a per customer basis, customer acquisition and retention costs are lower because, in general, retention costs are lower than acquisition costs.
Retail margin	EBITDA margin

Source: Independent Pricing And Regulatory Tribunal of New South Wales, 2002. "Mid-term review of regulated retail prices for electricity to 2004", Report and Determination to the Minister for Energy, June. Independent Pricing And Regulatory Tribunal of New South Wales, 2004. "NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07", Final Report and Determination, June. Independent Pricing and Regulatory Tribunal, 2007. "Promoting retail competition and investment in the NSW electricity industry, Regulated electricity retail tariffs and charges for small customers 2007 to 2010", Electricity—Final Report and Determination Det07-01, June. Independent Pricing and Regulatory Tribunal, 2010. "Review of regulated retail tariffs and charges for electricity 2010-2013", Electricity — Final Report, March.

B.3 South Australia

ESCOSA's terms of reference have changed somewhat over the years:

- For its 2003 and 2004 determinations, ESCOSA was required to have regard to AGL SA's actual cost of wholesale energy and costs incurred by a prudent efficient retailer (ESCOSA, 2004). ESCOSA did not therefore include a provision for headroom or CAC.
- In its 2005 determination, ESCOSA considered the costs 'that an efficient retailer would be expected to incur in meeting the responsibilities of standing contract supply to small customers' (ESCOSA, 2005). The Commission's assessment was limited to reviewing AGL SA's prudent controllable costs, namely the wholesale energy cost, the operating costs and the retail margin, and that no allowance should be made for headroom.
- In its 2007 determination, ESCOSA was required to consider 'consumers' long-term interests' (ESCOSA (2007) to determine retail prices that would:
 - Reflect the costs of an efficient retailer in supplying customers on standard contracts; and over the period;
 - Encourage active competition;
 - Encouraging ongoing, efficient investment; and
 - Provide an appropriate return for an efficient declared retailer.

However, ESCOSA elected not to provide an allowance for CAC.

Table B.3

COMPONENTS OF REGULATED PRICE CONTROLS

Cost component	Approach taken
ESCOSA 2003	
WEC	Modelled contracting strategies for various scenarios using AFMA contract prices having regard to AGL SA's actual cost and costs incurred by a prudent efficient retailer, including: <ul style="list-style-type: none"> • Hedge mismatch allowance • Other risks allowance • Transmission and distribution network losses • NEMMCO fees • Ancillary services costs • Cost of compliance with green energy requirements • Cost of bank guarantees
ROC	Based on benchmarking analysis and AGL SA's actual cost
CAC/headroom	Not provided for
Retail margin	Percentage of AGL SA's total controllable costs for standing contract retailing (WEC and ROC)
ESCOSA 2004	
WEC	Modelled contracting strategies for various scenarios using AFMA contract prices having regard to AGL SA's actual cost and costs incurred by a prudent efficient retailer, taking into account: <ul style="list-style-type: none"> • Hedge mismatch allowance • Other risks allowance • Transmission and distribution network losses • NEMMCO fees • Ancillary services costs • Cost of compliance with green energy requirements • Cost of bank guarantees
ROC	Based on AGL SA's actual cost and benchmarking analysis
CAC/headroom	Not provided for
Retail margin	Percentage of AGL SA's total controllable costs for standing contract retailing (WEC and ROC)
ESCOSA 2005	
WEC	Modelled contracting strategies for various scenarios using AFMA contract prices having regard to AGL SA's actual cost and costs incurred by a prudent efficient retailer, taking into account: <ul style="list-style-type: none"> • Hedge mismatch allowance • Other risks allowance • Transmission and distribution network losses • NEMMCO fees • Ancillary services costs • Cost of compliance with green energy requirements • Cost of bank guarantees
ROC	Based on AGL SA's actual cost and benchmarking analysis
CAC/headroom	Not provided for
Retail margin	Percentage of AGL SA's total controllable costs for standing contract retailing (WEC and ROC)

Cost component	Approach taken
ESCOSA 2007	
WEC	Modelled contracting strategies for various scenarios using AFMA contract prices having regard to AGL SA's actual cost and costs incurred by a prudent efficient retailer, taking into account: <ul style="list-style-type: none"> • AGL SA's proposal for an LRMC benchmark • Hedge mismatch allowance • Other risks allowance • Transmission and distribution network losses • NEMMCO fees • Ancillary services costs • Cost of compliance with green energy requirements • Cost of bank guarantees
ROC	Based on AGL SA's actual cost and benchmarking analysis
CAC/headroom	Included, but not calculated explicitly
Retail margin	Percentage of AGL SA's total controllable costs for standing contract retailing (WEC and ROC)

Source: Essential Services Commission of South Australia, 2003. "2004 Electricity Standing Contract Price Final Report", December. Essential Services Commission of South Australia, 2004. "Electricity Standing Contract Price, Price Determination", December. Essential Services Commission of South Australia, 2005. "Inquiry into Retail Electricity Price Path, Final Report", March. Essential Services Commission of South Australia, 2007. "2007 Review of Retail Electricity Price Path Final Inquiry Report & Price Determination (Public Version)", November.

B.4 Victoria

Regulatory retail price determinations for Victoria that were made after the Office of the Regulator General's (ORG's) 2001 decision are not in the public domain. We have therefore relied on information reported in a 2008 report by ACG, which describes the approach used to derive tariffs.

Table B.4

COMPONENTS OF REGULATED PRICE CONTROLS

Cost component	Approach taken
ORG 2001	
WEC	Modelled contracting strategies of retailer specific energy benchmarks using AFMA forward contract prices, including: <ul style="list-style-type: none"> • Allowance for hedging mismatch • Smelter allowance • Cost of compliance with green energy requirements (RET) • Transmission and distribution network losses • NEMMCO fees • Ancillary services costs
ROC	Based on retailers' actual costs and benchmarking, including FRC allowance
CAC	Not provided for
Retail margin	Percentage of sale or revenues, based on benchmarking analysis

Cost component		Approach taken
CRA 2003		
WEC	n/a	
ROC		ORG's mean benchmark of \$67 per customer revised to \$90 per customer on the basis that this represented retailers' views of operating costs
CAC	n/a	
Retail margin		Net retail net margin increased to promote more effective competition and provide more 'headroom'
CRA 2004-07		
WEC	n/a	
ROC		Based on benchmarking against other jurisdictions, determined with reference to IPART estimates
CAC		Based on IPART's approach using Victorian customer churn figures.
Retail margin		Net retail margins based on actual outcomes

Source: Allen Consulting Group, 2008. "South Australian Gas Standing Contract Prices – Price Path Review and Inquiry, Benchmarking analysis", March.

B.5 Queensland

The QCA is required to estimate costs for a stand-alone retailer with an established customer base that (QCA, 2007):

- Has a significant share of the state's retail electricity market;
- Provides retail services to a cross-section of customers throughout the state;
- Has a mix of customers in the same proportions as the customer mix for Queensland as a whole;
- Earns a reasonable retail margin.

Table B.5

COMPONENTS OF REGULATED PRICE CONTROLS

Cost component	Approach taken
QCA 2007	
WEC	LRMC of energy based on stand alone cost of the most efficient combination of generating technologies for Queensland considered as an isolated region, including: <ul style="list-style-type: none"> • Energy purchase factor to reflect mismatch between actual energy purchase costs and LRMC of energy • Cost of compliance with green energy requirements (QGS, MRET) • NEM participant fees • Ancillary services charges • Network losses
ROC	Based on costs of a representative efficient retailer (rather than actual retailer) with a significant share of the market and a representative customer base, including FRC costs.
CAC	Included in ROC to reflect loss of scale due to the loss of customers in a competitive market.
Retail margin	Percentage of retailers' total costs (WEC, ROC and network costs)
QCA 2008	
WEC	Based on 50/50 weighting of LRMC of energy and energy purchase costs, including: <ul style="list-style-type: none"> • Cost of compliance with green energy requirements (QGS, MRET) • NEM participant fees • Ancillary services charges • Network losses
ROC	Based on benchmarked ROC in other jurisdictions
CARC	Based on estimates of customer churn and refers to cost per individual customer switching retailer of \$171.43 (in 2007-08 dollars) and a separate cost per individual customer transferring contracts with the same retailer of \$100.00 (in 2007-08 dollars).
Retail margin	Percentage of retailers' total costs (WEC, ROC and network costs)
QCA 2009, 2010	
WEC	Based on 50/50 weighting of LRMC of energy and energy purchase costs, including: <ul style="list-style-type: none"> • Cost of compliance with green energy requirements (QGS, MRET) • NEM participant fees • Ancillary services charges • Network losses
ROC	Based on benchmarked ROC in other jurisdictions
CARC	Included
Retail margin	Percentage of retailers' total costs (WEC, ROC and network costs)

Source: Queensland Competition Authority, 2009. "Remade Final Decision, 2008-09 Benchmark Retail Cost Index", June. Queensland Competition Authority, 2007. "Final Decision, Advice to the Minister for Mines and Energy, Benchmark Retail Cost Index for Electricity: 2006-07 and 2007-08", June. Queensland Competition Authority, 2009. "Final Decision, 2009-10 Benchmark Retail Cost Index", June. Queensland Competition Authority, 2010. "Final Decision, Benchmark Retail Cost Index for Electricity: 2010-11", May.

B.6 Tasmania

Tasmania entered into the NEM on May, 2005. Tasmania does not currently have FRC for small customers, and regulatory determinations are accordingly directed at the efficient costs of providing services, taking account of the economies of scale of operations and likely productivity gains over the period (OTTER, 2007).

Table B.6

COMPONENTS OF REGULATED PRICE CONTROLS

Cost component	Approach taken
OTTER 2003	
WEC	Based on vesting contract arrangements with Hydro Tasmania, including: <ul style="list-style-type: none"> • Transmission losses • Ancillary services and system controller fees • Cost of compliance with green energy requirements (RET)
ROC	Based on benchmark ROC, exclusive of FRC costs
CAC	Not relevant
Retail margin	Net retail margins on sales [?]
OTTER 2006	
WEC	Based on vesting contract arrangements with Hydro Tasmania, including: <ul style="list-style-type: none"> • Transmission loss factors Additionally: <ul style="list-style-type: none"> • NEM entry related costs; • NEM charges; • Ancillary services charges; • Cost of compliance with green energy requirements (RET)
ROC	Based on benchmark ROC, exclusive of FRC costs
CAC	Not relevant
Retail margin	Net retail margins on sales [?]
OTTER 2007	
WEC	Wholesale market energy price for non-contestable customers determined by government regulation for calendar years 2008 - 2010
ROC	Based on Aurora's actual costs and benchmarked ROC, exclusive of FRC costs
CAC	Not relevant
Retail margin	Net retail margins on sales

Source: Office of Energy, 2009. "Electricity Retail Market Review, Final Recommendations Report", Review of Electricity Tariff Arrangements, Office of Energy Report to the Minister for Energy, January. Office of the Regulator-General, Victoria, 2001. "Special Investigation, Electricity retailers' proposed price increases", Final Report, December. Office of the Tasmanian Energy Regulator, 2006. "Statement of Reasons, Determination of Maximum Prices for Electricity Retailing to Tariff Customers on Mainland Tasmania for 2007, November.

B.7 Western Australia

Western Australia does not currently have FRC. In setting tariffs, the Office of Energy aimed to reflect the costs of supply.

Table B.7

COMPONENTS OF REGULATED PRICE CONTROLS

Cost component	Approach taken
Office of Energy 2009	
WEC	Based on the forecast LRMC of wholesale electricity and Verve Energy's sustainable price, including: <ul style="list-style-type: none"> • Cost of compliance with green energy requirements (CPRS, MRET) • Ancillary services fees • Market fees • Ancillary services charges • Network losses • Tariff equalisation fund costs
ROC	Determined by class of customer
CAC	No
Retail margin	Net retail margin on sales

Source: Office of Energy, 2009. "Electricity Retail Market Review, Final Recommendations Report", Review of Electricity Tariff Arrangements, Office of Energy Report to the Minister for Energy, January.

B.8 Summary of determinations

The following tables summarise the regulatory determinations for each of the jurisdictions we have reviewed.

Table B.8

NEW SOUTH WALES DETERMINATIONS

Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Prices	\$2000/01	\$2004/05	\$2004/05	\$2004/05	\$2006/07	\$2006/07	\$2006/07	\$2009/10	\$2009/10	\$2009/10
WEC										
Market-based electricity purchase cost allowance (\$/MWh)					48.7-57.8	47.7-56.7	43.7-52.2	61.7-68.4	69.1-75.8	95.2-103.8
LRMC costs (\$/MWh)	39-59	47	47	47	42.4-42.6	42.5-51.9	42.6-52.0			
Volatility allowance (\$/MWh)					0.7-1.1	0.7-1.1	0.7-1.1			
Greenhouse & renewable costs (MRET, NRET, GGAS), (\$/MWh)	incl. above	3	3	3	4.3-4.7	4.7-5.0	5.5-5.7	\$2.50	\$3.30	\$3.90
NEM fees (\$/MWh)	1.37	1	1	1	0.7	0.7	0.7	\$0.80	\$0.80	\$0.80
Energy losses (%)	yes	incl in ROC	incl in ROC	incl in ROC	4.2-6.8	4.1-6.7	3.8-6.3	4.9-7.8	5.4-8.7	7.2-11.9
Total WEC (\$/MWh)	40.37-60.37	51	51	51	61.6-70.0	60.7-62.8	57.1-65	72.7-77.9	81.9-86.7	109.8-117.9
ROC										
Retail cost allowance (\$/customer)		70	70	70	75.0	75.0	75.0	\$75.30	\$77.20	\$79.20
CAC (\$/customer)	incl. FRC costs	0	0	0	35.0	35.0	35.0	\$36.80	\$36.80	\$36.80
Adjustment for double counting (\$/customer)		0	0	0	-5.0	-5.0	-5.0			
Late payment fee deduction								-2.30	-2.30	-2.30
Total ROC (\$/customer)	45-75	70	70	70	105.0	105.0	105.0	\$109.80	\$111.70	\$113.70
Net retail margin (% of sales)	1.5-2.5%	2.0%	2.0%	2.0%	5.0%	5.0%	5.0%	5.4%	5.4%	5.4%

Source: Independent Pricing And Regulatory Tribunal of New South Wales, 2002. "Mid-term review of regulated retail prices for electricity to 2004", Report and Determination to the Minister for Energy, June. Independent Pricing And Regulatory Tribunal of New South Wales, 2004. "NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07", Final Report and Determination, June. Independent Pricing and Regulatory Tribunal, 2007. "Promoting retail competition and investment in the NSW electricity industry, Regulated electricity retail tariffs and charges for small customers 2007 to 2010", Electricity—Final Report and Determination Det07-01, June. Independent Pricing and Regulatory Tribunal, 2010. "Review of regulated retail tariffs and charges for electricity 2010-2013", Electricity — Final Report, March.

Table B.9

QUEENSLAND DETERMINATIONS

	2006-07	2007-08	2008-09	2009-10	2010-11 (draft)
Prices - All dollars in money of the day	2006-07	2007-08	2008-09	2009-10	2010-11 (draft)
WEC					
Energy purchase factor (\$/MWh)	9.0	24.4	29.0	26.6	29.3
LRMC costs(\$/MWh)	43.3	21.0	21.3	28.9	29.3
MRET (\$/MWh)			3.6	2.4	3.0
Queensland gas scheme (\$/MWh)				2.6	2.8
Ancillary services fees (\$/MWh)	0.3	0.4	0.4	0.4	0.4
NEM fees (\$/MWh)			0.3	0.3	0.3
Total energy costs	55.9	49.0	54.7	61.2	65.2
ROC					
Retail cost allowance (\$/customer)					
FRC costs (\$/customer)	75.0	77.4	81.7	83.2	85.9
CARC (\$/customer)	2.0	28.1	26.7	26.5	40.52
Total cost allowance (\$/customer)	77.0	105.5	108.4	109.7	125.9
Net retail margin (% of sales)	5.0%	5.0%	5.0%	5.0%	5.0%

Source: Queensland Competition Authority, 2009. "Remade Final Decision, 2008-09 Benchmark Retail Cost Index", June. Queensland Competition Authority, 2007. "Final Decision, Advice to the Minister for Mines and Energy, Benchmark Retail Cost Index for Electricity: 2006-07 and 2007-08", June. Queensland Competition Authority, 2009. "Final Decision, 2009-10 Benchmark Retail Cost Index", June.

Table B.10

SOUTH AUSTRALIAN DETERMINATIONS

	2003	2004	2005	2006	2007	2008	2009	2010
Prices	\$2002	\$2004	\$Mar 2005	\$Mar 2005	\$Mar 2005	\$Mar 2008	\$Mar 2008	\$Mar 2008
WEC								
Wholesale energy costs (\$/MWh)	71.0	68.5	n/a	n/a	n/a	n/a	n/a	n/a
Hedge mismatch allowance (%)	5.0%	5.0%						
Other Risks Allowance (%)	5.0%	5.0%						
Network losses (%)	8.5%	8.5%						
NEMMCO charges (\$/MWh)	1.5	1.5						
Total WEC (\$/MWh)	n/a	n/a	69.3	70.8	69.3	76.66-87.70	78.77-88.60	77.00-90.80
ROC								
Retail cost allowance (\$/customer)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Headroom (\$/customer)	\$0.00	0.00	0.00	0.00	0.00	incl in ROC	incl in ROC	incl in ROC
Total cost allowance (\$/customer)	\$80.0	82.0	85.0	86.7	88.5	95.8	91.8	88.0
Net retail margin (% of controllable costs)	5.00%	5.00%	10.00%	10.00%	10.00%	10.00%	10.0%	10.0%

Notes: The South Australian retail margin is adjusted from 10 per cent of controllable costs (WEC+ROC). ESCOSA states in its most recent determination that a 1:2 conversion rate from a margin on total costs as opposed to a margin on controllable costs is appropriate (ESCOSA 2007).

Source: Essential Services Commission of South Australia, 2003. "2004 Electricity Standing Contract Price Final Report", December. Essential Services Commission of South Australia, 2004. "Electricity Standing Contract Price, Price Determination", December. Essential Services Commission of South Australia, 2005. "Inquiry into Retail Electricity Price Path, Final Report", March. Essential Services Commission of South Australia, 2007. "2007 Review of Retail Electricity Price Path Final Inquiry Report & Price Determination (Public Version)", November.

Table B.11

VICTORIAN DETERMINATIONS

Year	CY 2000	2003-04	2004-05	2005-06	2006-07
Prices	\$2001	\$2003	\$2006-07	\$2006-07	\$2006-07
WEC					
Market-based electricity purchase cost allowance (\$/MWh)	65-76				
Smelter allowance (\$/MWh)	\$2.4				
Volatility allowance(\$/MWh)	n/a				
Geenhouse & renewable costs (RET)	\$0.2				
Total WEC (\$/MWh)	65-76	n/a	n/a	n/a	n/a
ROC					
Retail cost allowance (\$/customer)	50-80	\$90.0	\$75.0	\$75.0	\$75.0
FRC cost (\$/customer)	5-10				
CAC (\$/customer)	\$0.0	\$0.0	\$49.0	\$49.0	\$49.0
Total ROC (\$/customer)	55-90	\$90.0	\$124.0	\$124.0	\$124.0
Net retail margin (% of sales)	2.5-5%	5-8%	1-13%	1-13%	1-13%

Source: Allen Consulting Group, 2008. "South Australian Gas Standing Contract Prices – Price Path Review and Inquiry, Benchmarking analysis", March.

Table B.12

WESTERN AUSTRALIAN DETERMINATIONS

Year	2009-10	2010-11	2011-12
Prices	2007/08	2007/08	2007/08
WEC			
Wholesale energy costs (\$/MWh)	109.7	114.3	114.2
CPRS (\$/MWh)	0.0	24.8	27.3
MRET (\$/MWh)	1.2	1.8	2.5
Ancillary services (\$/MWh)	1.4	1.4	1.5
Market fees (\$/MWh)	0.6	0.6	0.6
Total WEC (\$/MWh)	121.6	158.5	166.5
ROC			
Net retail margin (% of sales)	3.0%	3.0%	3.0%

Source: Office of Energy, 2009. "Electricity Retail Market Review, Final Recommendations Report", Review of Electricity Tariff Arrangements, Office of Energy Report to the Minister for Energy, January.

Table B.13

TASMANIAN DETERMINATIONS

	2004	2005	2006	2007	Jan-Jun 08	2008-09	2009-10
Prices	\$May2003	\$May2003	\$May2003	\$June 2006	\$June 2006	\$June 2006	\$June 2006
WEC							
Wholesale energy costs (\$/MWh)				\$57.6	\$60.5	\$61.6	n/a
Total WEC (\$/MWh)				n/a	n/a	n/a	n/a
ROC							
Total cost allowance (\$/customer)	\$76.7	\$76.7	\$76.7	\$85.0	\$85.0	\$85.0	\$85.0
Net retail margin (% of sales)	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

Source: Office of Energy, 2009. "Electricity Retail Market Review, Final Recommendations Report", Review of Electricity Tariff Arrangements, Office of Energy Report to the Minister for Energy, January. Office of the Regulator-General, Victoria, 2001. "Special Investigation, Electricity retailers' proposed price increases", Final Report, December. Office of the Tasmanian Energy Regulator, 2006. "Statement of Reasons, Determination of Maximum Prices for Electricity Retailing to Tariff Customers on Mainland Tasmania for 2007, November.

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