ICRC

independent competition and regulatory commission

Draft report

Retail prices for franchise electricity customers 2012–14

Report 2 of 2012
April 2012

The Independent Competition and Regulatory Commission (the Commission) was established by the *Independent Competition and Regulatory Commission Act 1997* (ICRC Act) to determine prices for regulated industries, advise government about industry matters, advise on access to infrastructure, and determine access disputes. The Commission also has responsibilities under the ICRC Act for determining competitive neutrality complaints and providing advice about other government-regulated activities. Under the *Utilities Act 2000*, the Commission has responsibility for licensing utility services and ensuring compliance with licence conditions.

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Foreword

Since the transition to full retail competition in the ACT electricity market in 2003, the Commission has undertaken six reviews of prices for franchise customers and issued five price directions. Over that period the Commission has developed a comprehensive and robust methodology for assessing changes in the cost base of the incumbent retailer. The challenges presented by the current review and the task of providing a price direction for 2012–13 are, however, unique.

The methodology used by the Commission assumes that a prudent retailer would hedge its purchases of energy by progressive purchases in the futures markets for electricity over the two years prior to the commencement of the year in which the energy is to be supplied. The last two years have seen a series of changes of policy in regard to the introduction of a price on carbon which have engendered enormous uncertainty about the future price of electricity. While that uncertainty has been largely removed with the passage of the legislation introducing a price on carbon, that passage was only secured late last year, meaning that for much of the period during which retailers were undertaking their hedging the future price of electricity was highly uncertain.

This unusually elevated level of uncertainty has stimulated the introduction of new arrangements for the sale and purchase of electricity for future delivery. These new arrangements were not envisaged in 2010 when the Commission undertook its last review of these matters. Consequently the major challenge for the Commission has been to decide how to modify its methodology to take account of these new developments. The Commission's response to this challenge is described in chapter 2 of this report.

The scale of the impact of the introduction of a price on carbon has meant that it has been of paramount importance for the Commission to be confident that the data and methods it is using to measure this impact are providing a reliable assessment. Although, as explained in the body of the report, the Commission is still conducting investigations into data sources, it is confident that the approach it is taking is producing a reliable assessment of the impact of the introduction of a price on carbon on the price of electricity.

The lion's share of the increase in the retail price of electricity for franchise customers in the ACT is attributable to the introduction of a price on carbon: some 13 percentage points of an anticipated increase of about 17%. The rest is largely attributable to increases in network costs. The increase in the price of electricity brought about by the introduction of a price on carbon is by design part of the Australian Government's response to climate change. The Commission's initial analysis suggests that the impact on the weekly costs of electricity for the average residential customer in the ACT will be a little above the estimate of the national impact released by the Australian Government.

Compensation for households is part of the package of measures introduced by the Australian Government in response to climate change so, for some households at least, there will be some mitigation of the impact of these price rises. In its final report, when the details will be clearer, the Commission will provide an analysis of the net impact of these measures on households in the ACT.

Malcolm Gray
Senior Commissioner
5 April 2012

How to make a submission

The Independent Competition and Regulatory Commission (the Commission) welcomes submissions on the issues raised in this draft report as well as any other relevant information that could assist the Commission's determination of a price direction for the supply of electricity to franchise customers.

Responses to the draft report should be supported with evidence and data wherever possible.

Submissions may be mailed to the Commission at:

Independent Competition and Regulatory Commission
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Alternatively, submissions may be emailed to the Commission at icrc@act.gov.au. The Commission encourages interested parties to make submissions in either Microsoft Word format or PDF (OCR readable text format—that is, they should be direct conversions from the word-processing program, rather than scanned copies in which the text cannot be searched).

Submit your submission documents along with a completed submission cover sheet, which is available on the Commission's website at www.icrc.act.gov.au/waterandsewerage. For submissions received from individuals, all personal details (for example, home and email addresses, telephone and fax numbers) will be removed for privacy reasons before the submissions are published on the website.

The Commission is guided by and believes strongly in the principles of openness, transparency, consistency and accountability. Public consultation is a crucial element of the Commission's processes. It is the Commission's preference that all submissions it receives be treated as public and be published on the Commission's website unless the author of the submission indicates clearly that all or part of the submission is confidential and not to be made available publicly. Where confidential material is claimed, the Commission prefers that this be under a separate cover and clearly marked 'In Confidence'. The Commission will assess the author's claim and discuss appropriate steps to ensure that confidential material is protected while maintaining the principles of openness, transparency, consistency and accountability.

The secretariat may be contacted at the above address, by telephone on (02) 6205 0799 or by fax on (02) 6207 5887. The Commission's website is at www.icrc.act.gov.au.

Submissions on the draft report are due with the Commission by **5 pm, 8 May 2012**.

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1 Introduction

1.1 Background to the review

Retail competition for small electricity customers (small businesses and households) in the Australian Capital Territory (ACT) was introduced on 1 July 2003. This followed the opening of the market for customers consuming more than 160 megawatt hours (MWh) per year (predominantly large businesses) in 1998 and for those consuming more than 100 MWh per year (mainly medium-sized businesses) in 2001.

When the ACT Government decided to open the market to all customers, it also required that ActewAGL Retail offer customers consuming less than 100 MWh per year a non-negotiated standard customer contract incorporating a tariff approved by the Independent Competition and Regulatory Commission (the Commission). Customers who remain on non-negotiated contracts are known as franchise customers and are subject to a suite of regulated tariffs. Customers who choose to enter into alternative contract arrangements with ActewAGL Retail or other electricity retailers are known as non-franchise customers.

At the time retail competition was introduced for small customers, the ACT Government issued a reference to the Commission to provide a price direction for the period 1 July 2003 to 30 June 2006.[1] Towards the end of the price direction, the ACT Government sought the Commission's views on the need for continued price regulation. In April 2006, based on the prospects for market development as they then appeared, the Commission recommended the price-setting arrangements be discontinued and a monitoring arrangement put in place. The Commission suggested that the existing tariffs be extended for 12 months to allow for necessary legislative changes to be undertaken.[2]

The ACT Government has issued further price directions since 2006, and the Commission's recommendation to adopt a price monitoring approach was not accepted.[3]

On 21 September 2011, the ACT Government issued the Commission with terms of reference seeking a price direction to determine the electricity tariffs for franchise customers for the period 1 July 2012 to 30 June 2014.[4]

1.2 Scope of the terms of reference

The Commission has been asked by the ACT Government to provide 'a price direction for the supply of electricity to franchise customers for the period 1 July 2012 to 30 June 2014 with provision where appropriate for a review by 30 June 2013'.

There are approximately 130,000 franchise customers in the ACT that ActewAGL Retail supplies in accordance with the terms of its standard customer contract. These customers consume approximately 1,234 gigawatt hours per year, which is approximately 43% of total ACT electricity consumption.

[1] ICRC 2003.
[2] ICRC 2006.
[3] ICRC 2007, 2008, 2009, 2010b.
[4] Independent Competition and Regulatory Commission (Price Direction for the Supply of Electricity to Franchise Customers) Terms of Reference Determination 2011 (Disallowable instrument DI2011–261).

Specifically, the terms of reference require the Commission to consider the following matters in its investigation:

a. The impact on direct electricity costs of changes in government policies and pass-through of those costs to regulated prices including, but not restricted to:
    i. the Commonwealth Government Carbon Tax
    ii. Commonwealth or ACT retailer obligation energy efficiency schemes
    iii. the Commonwealth Government's Large and Small Renewable Energy Targets
    iv. the ACT Feed-in Tariff
    v. any other schemes implemented to address climate change.
b. The efficient and prudent cost of managing risk in the cost of purchasing electricity.
c. The requirements of s. 20 of the ICRC Act.
d. Any other matters the Commission considers relevant.

The Commission must report in sufficient time to allow ActewAGL Retail to make any necessary changes to its billing system and to provide information on the new tariffs to customers before the new tariffs commence on 1 July 2012.

A full copy of the terms of reference is at Appendix 1.

1.3 Structure of the draft report

The remainder of the draft report is structured as follows:

- Chapter 2 discusses the major issues surrounding the regulated retail price direction and summarises the Commission's methodology for its determination.
- Chapter 3 provides a detailed explanation of efficient costs and their constituent cost elements.
- Chapter 4 describes the procedure for setting the regulated retail price in 2013–14.
- Chapter 5 discusses pass-through arrangements.
- Chapter 6 presents the draft price direction for 2012–14.
- Appendix 1 reproduces the terms of reference.
- Appendix 2 reproduces articles 15, 16 and 20 from the ICRC Act.
- Appendix 3 provides summaries of submissions received in response to the issues paper released by the Commission in February 2012.

1.4 Review timeline

The Commission proposes to adopt the following timeline for the review.

Activities	Dates
Release of issues paper	23 December 2011
Closing of submissions on issues paper	3 February 2012
Release of this draft report	5 April 2012
Closing of submissions on draft report	8 May 2012
Public hearing (if stakeholder interest)	11 May 2012
Final report and price direction	8 June 2012
ActewAGL Retail implementation of tariff changes	From 1 July 2012

The release of the final report by 8 June is designed to allow ActewAGL Retail sufficient time to make necessary changes to its billing system and provide information to customers, as required by the terms of reference.

The Commission is required under section 17(4)(a) of the *Independent Competition and Regulatory Commission Act 1997* (ICRC Act) to conduct a public hearing for all price regulation investigations. The venue and time are yet to be determined. Once established, the Commission will advertise the details of the public hearing in the *Canberra Times* and on its website in late April or early May. Alternatively, interested parties may contact the Commission directly in late April or early May for details.

2 Discussion of major issues

The Commission developed a cost index model that calculates the year-on-year movement in the economically efficient cost of providing electricity to an incumbent retailer's regulated customer base.[5] The index, which consists of the individual cost components of an efficient incumbent retailer (see chapter 3), is applied to the basket of regulated tariffs that are adjusted under a weighted average price cap mechanism (set out in chapter 6).

As part of each review the Commission reassesses the appropriateness of continuing with the existing cost index approach. In addition, the Commission considers whether the methodology (including data sources) adopted for calculation of the individual cost components remains valid.

The Commission has retained the broad index approach first established in 2007 but has refined the methodology used to calculate the individual cost components. For example, the Commission has adjusted the retail margin based on the provision of additional information and analysis. Similarly, it refined the calculation of the energy purchase cost (EPC) component as part of the 2010 review.

The Commission indicated in its issues paper for this review that its preference was to retain a cost index methodology incorporating an energy purchase cost model.[6] The Commission did not receive any submissions that argued for the adoption of an alternative approach to the current cost index model. The Commission considers, therefore, that there is broad agreement to retain the use of the cost index approach.

There are, however, a range of views about the way individual components of the cost index should be calculated. In order to provide 'a price direction for the supply of electricity to franchise customers for the period 1 July 2012 to 30 June 2014',[7] the Commission must make a determination in respect of each of these components. In examining the views that have been expressed, the Commission has identified two issues that stand out in terms of their significance for the price direction:

- the appropriate regulatory benchmark
- measurement of the energy purchase cost, particularly accounting for the impact of a price on carbon.

This chapter deals with these two issues. The balance of the cost elements are addressed in chapter 3 in the context of the build-up of the total cost index. Here and in chapter 3 comments from submissions on a particular cost element are noted in the discussion of that cost element. A synopsis of the comments in each submission is provided in Appendix 3.

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[5] ICRC 2007.
[6] ICRC 2011b.
[7] DI2011–261.

2.1 The appropriate regulatory benchmark

Identification of issue

The question of the appropriate regulatory benchmark is a debate as to whether ActewAGL Retail or a hypothetical new-entrant retailer should be used as the point of reference for the components used in the efficient cost methodology. The distinction between basing the regulatory approach on the incumbent or a new entrant focuses on a single cost component.

In the issues paper, the Commission argued that the debate boils down to whether to include an allowance for the recovery of costs associated with acquiring and retaining customers—customer acquisition costs (CAC) or more commonly referred to as customer acquisition and retention costs (CARC). This is based on the observation that an incumbent and a new entrant face the same set of cost drivers, except for the costs of attracting and retaining customers. Both incumbent firms and new entrants must purchase electricity from the wholesale market, pay network businesses for transporting the electricity and incur retailing costs such as billing customers. A new entrant, however, must incur additional costs to build a loyal customer base—costs that an incumbent firm is unlikely to encounter to a similar extent.

Among the submissions on the issues paper, the ACT Civil and Administrative Tribunal was the only respondent to directly support the notion that the regulatory benchmark should be modelled on the incumbent retailer.[8] Most other respondents[9] disagreed and cited the inclusion of CARC in other Australian jurisdictions and the Australian Energy Market Commission's review of competition in the ACT electricity retail market.[10] The review specifically mentioned CARC as a way to encourage further competition in the ACT retail electricity market.

ActewAGL Retail noted this point in its submission, and suggested that the Commission's task is 'to set a market based price in an open market environment'.[11] Due to full retail contestability, retailers must make efforts to acquire new customers and retain current ones. A methodology based on the incumbent retailer does not reflect these costs. Origin Energy further explained that the Commission was misguided in its belief that:

> an incumbent firm and new entrants face the same set of cost drivers except for the cost of attracting customers. This observation may be true in an immature market in which the incumbent firm does not need to actively compete. However, as competition increases the incumbent must ramp up its acquisition and retention budget otherwise it risks losing a substantial share of the market.[12]

Those that argued for the adoption of a new-entrant approach did so largely on the basis that without it the regulated retail price of electricity would be too low to enable new entrants to compete in the market. They argued that only through the inclusion of a CARC allowance would new entrants be able to enter the market, competition ensue and benefits accrue to consumers in the form of lower prices and increased service offerings over the longer term.

[8] ACAT 2012, p. 1.
[9] ActewAGL Retail 2012, pp. 19–20; AGL 2012, p. 1 & 5; Origin Energy 2012, pp. 1–2; TRUenergy 2012, p. 1.
[10] AEMC 2011.
[11] ActewAGL Retail 2012, p. 7.
[12] Origin Energy 2012, p. 2.

The Commission's considerations

In the past, the Commission has taken the opposing view that it is appropriate to develop a price direction based on the costs incurred by an incumbent servicing its regulated customers rather than a hypothetical new entrant. The Commission has considered this debate in detail in its previous reviews. In its 2010 final decision the Commission wrote extensively on the issue of increasing the regulated retail tariff in order to promote competition. In that report the Commission:

> formed the view that, given arrangements in the ACT electricity market at present, a 'regulated' franchise tariff, where customers are able to benefit from ActewAGL Retail's economies of scale and where customer acquisition costs are not included in the franchise tariff, is likely to provide greater benefits to customers than a notional 'competitive' tariff.[13]

In the issues paper for this review, the Commission restated its preferred position and noted that it 'has always taken the view that, in the absence of compelling reasons to do otherwise, the regulated retail tariff should be based on the efficient costs of the incumbent firm, ActewAGL Retail'.[14] The submissions received on the issues paper from electricity retailers once again argued for the inclusion of an allowance for CARC. These submissions, however, did not address the Commission's 2010 analysis, which noted that the retail operating cost allowance in the ACT compared with the allowance in other states, adjusted for economies of scale and inclusive of CARC allowance, is in the mid range of the comparators.[15] As part of this analysis the Commission noted that its 2003 approach to determining efficient retail operating costs recognised sales and marketing costs. The Commission also noted that any increase in the retail operating cost allowance that might be supported by reference to benchmarking is unlikely to result in an increase in the franchise tariff to an extent sufficient to promote competition beneficial to consumers.

Consequently the Commission retains its view that in providing a 'price direction for the supply of electricity to franchise customers'[16] it should base the costs on those that would be incurred by an incumbent retailer.

2.2 Impact of the price on carbon on energy purchase costs

Submissions were received from the electricity retailers that called for the use of an alternative methodology for the calculation of the EPC component.[17] The EPC component represents approximately 40% of the final price of electricity and is the largest component under the control of an electricity retailer (given that network costs are unavoidable).

The most important point made in these submissions was that the Commission needed to make adjustments to its approach to measuring EPC to reflect significant changes in the hedging behaviour of retailers brought about by the imminent introduction of a price on carbon. Consideration of those submissions forms the balance of this chapter. Submissions were also received on other aspects of measuring the EPC, including the possibility of moving to an approach based on long-run marginal cost. Those submissions are discussed in chapter 3.

[13] ICRC 2010b, p. 53.
[14] ICRC 2011b, p. 5.
[15] ICRC 2010b, p. 52.
[16] DI2011–261.
[17] While submissions also called for amendments to how other cost components are calculated, none were based on the adoption of a new methodology as occurred with respect to the energy purchase cost calculation.

Identification of issue

The introduction of a price on carbon represents the major challenge faced by the Commission as part of this review. The price on carbon affects the calculation of the EPC component of the cost build-up.

In the issues paper, the Commission provided the following background:

> An electricity retailer must have energy available to meet the varying demands of its customers. It can obtain that energy in a variety of ways. It can, for example, buy energy in the wholesale spot market as it is required to deliver it (with prices determined on a half-hourly basis throughout the day). Alternatively, it may enter into a contract with an electricity generator to supply energy at a predetermined price. The effective price a retailer ends up paying for its electricity is also influenced by any trading it may have done in the markets for electricity derivatives, for example, in the market for electricity futures operated by the Sydney Futures Exchange. Because the spot price of electricity is highly volatile—high prices are associated with peak demands for energy—a retailer will usually use a mix of these purchasing alternatives to try to reduce the price risk to which it is exposed because of this volatility. Such an approach is often described as adopting a hedging strategy.
>
> In order to estimate the efficient cost of electricity to a retailer, the Commission must model an efficient hedging strategy.[18]

In determining an efficient hedging strategy, the Commission has developed a model that is based on exchange-traded electricity contract information as reported on the Sydney Futures Exchange (SFE).[19] While the Commission adopted the use of exchange-traded data from the SFE, it acknowledged that electricity retailers also enter into contracts on an 'over-the-counter' (OTC) basis. In the issues paper, the Commission noted that:

> the Commission cannot observe contract prices because these transactions are not completed via a trading platform such as the Australian Stock Exchange, which makes price information public, but through so-called over-the-counter (OTC) transactions where the price agreed is typically known only to the parties. The Commission assumes, however, that when the futures contracts are being robustly traded, arbitrage between the OTC and futures markets will ensure that prices in the two markets stay closely aligned so that futures prices, which are publicly available, provide a good indicator of contract prices.[20]

ActewAGL Retail argued that the introduction of the price on carbon has fundamentally changed the manner in which it undertakes its hedging strategy, particularly its forward purchases which occur at the forward price (FP). ActewAGL Retail submitted the following:

> ActewAGL holds the view that the impact of the introduction of a carbon price on futures prices, in particular, provides a very strong case for changes to be made to the FP component of the EPC model.[21]

ActewAGL Retail argued that:

> The FP component of the existing EPC model is evaluated by reference to the average price of electricity futures traded through the Sydney Futures Exchange (SFE). In submissions to the Commission at the time the model was developed, ActewAGL noted that the use of this source

[18] ICRC 2011b, p. 8.
[19] The Commission developed the model as part of the previous price direction which applies from 1 July 2010 to 30 June 2012. As part of this review the Commission released several reports which explain the details of the model (include report reference).
[20] ICRC 2011b, p. 9.
[21] ActewAGL Retail 2012, p. 9.

before and following the introduction of a carbon price would be problematic. The Commission posited that arbitrage between over-the-counter (OTC) and SFE trades should ensure that prices stay closely aligned and it therefore held the view that prices for trades through the SFE, information on which is publicly available, provide a good indicator of prices for futures contracts within the overall wholesale electricity market. Whilst acknowledging the logic of this assumption prior to the introduction of the carbon price, ActewAGL believes that the introduction of a carbon price requires the Commission to reconsider its use of SFE data in 2012–14 determinations.

...

As a practical alternative to use of SFE data for 2012–14 determinations, ActewAGL recommends that the Commission:

- substitute the SFE forward price curve with a third party carbon exclusive curve;
- increase the FP averaging period to 2–3 years in line with a prudent retailer's actual hedging behaviour. If carbon exclusive prices are not available for that period, then the Commission should use as long a period as can be provided by this data; and
- include a separate allowance for carbon based on the industry-standard Australian Financial Markets Association (AFMA) Australian Carbon Benchmark (ACB) addendum.[22]

The Commission's considerations

Based on the submissions received from ActewAGL Retail, AGL Energy and Origin Energy and its own analysis, the Commission accepts that many retailers are likely to be entering into carbon-exclusive contracts.

It is apparent that uncertainty about whether and at what level a price on carbon may be struck has been increasing for several years. The Australian Government's Carbon Pollution Reduction Scheme, which was announced and then withdrawn, caused significant losses to parties that had entered future contracts following the announcement of the scheme at prices that included an allowance for a price on carbon, which then failed to materialise. The Commission understands that this growing uncertainty and the experience of the Carbon Pollution Reduction Scheme in particular has made generators and retailers increasingly unwilling to enter into contracts where they are exposed to the risks generated by the political processes surrounding the decision as to whether and at what level to introduce a price on carbon.

This increasing unwillingness to enter into contracts where they are exposed to the political risks associated with the possible introduction of a price on carbon led parties to seek a form of contract from which this risk could be excluded. In response to this need, the Australian Financial Markets Association (AFMA), which specialises in developing contracts for OTC trading, developed an addendum, known as the AFMA ACB addendum, to the standard-form contract used for OTC trading in electricity futures.

Traditional OTC contracts have been contracts for difference settled against the average half-hourly electricity spot price. The effect of the introduction of the AFMA ACB addendum is to determine the price to be settled against the spot price not, as previously, at the time the contract is made but at the time the contract is settled and to make that price contingent on the ruling price on carbon, if any, at that time. The AFMA ACB addendum specifies that the price to be used to determine the difference for the purpose of settling the contract will be made up of two parts: a price struck at the time the contract is made, known as the carbon-exclusive price, and an additional element, the carbon price adjustment, determined at the time the contract is settled at an amount equal to the price on carbon at that time multiplied by the National Electricity Market (NEM) average carbon intensity.

[22] Ibid., p. 10.

Assuming that nothing prevents the recently passed legislation from coming into effect, the price on carbon for 2012–13 will be $23 per tonne of CO_2-e (carbon dioxide equivalent). Allowing for a New South Wales carbon intensity of 0.91, the carbon price adjustment for contracts subject to the AFMA ACB addendum settled in 2012–13 will be approximately $21 per MWh.

Before considering how the emergence of what have become known as carbon-exclusive contracts and their widespread use should be treated by the Commission, it is worth pausing to understand the differences in the risks borne by the parties to traditional OTC contracts, which are largely the same as those borne by those trading electricity futures on the SFE, from those borne by parties trading carbon-exclusive contracts.

Leaving aside risks associated with the contract itself, such as counter-party risk, traders in electricity futures in the current environment are subject to risk from three sources: spot market risk, related to uncertainty about the balance between the demand for and supply of power that may exist in the market at any particular point in the future; political risk surrounding the possibility that a price on carbon may be introduced and uncertainty as to its level; and impact risk related to uncertainty about the impact the introduction of a price on carbon may have on prices in the spot market.

Spot market risk is essentially unavoidable and borne by traders in all forms of electricity futures, carbon-inclusive and carbon-exclusive OTC contracts and SFE futures trades. Political risk is borne by those trading traditional carbon-inclusive OTC contracts and SFE futures, but is specifically excluded from carbon-exclusive contracts by virtue of the contingent nature of the price at which that form of contract is settled. Impact risk is also largely unavoidable and borne by traders in all forms of electricity futures.

It is important to understand that, although the AFMA ACB addendum quantifies an allowance for a price on carbon, that allowance may or may not turn out to reflect the actual impact of the introduction of a price on carbon on electricity prices. The Commission notes, for example, the work undertaken by Frontier Economics for the Australian Energy Market Commission.[23] This work was based on the impact of the carbon price on wholesale electricity costs within the context of the original Carbon Pollution Reduction Scheme. The report included a summary of the percentage of pass-through as calculated by various consultants. The estimated percentages ranged between approximately 20% and 120%, and the average was approximately 70%. While the current carbon price package differs from that proposed as part of the Carbon Pollution Reduction Scheme, the Commission considers that the main conclusion of the report remains valid, namely that the impact of a price on carbon on electricity prices remains uncertain.

That said, examination of price trends and comparisons between carbon-inclusive and carbon-exclusive prices suggest that the market regards impact risk as far less serious than political risk.

Two critical points emerge from this discussion. The first is that a new form of futures contract has become widely used in the market and that the Commission's model of hedging by a hypothetical prudent retailer needs to recognise this. The second is that this new form of OTC contract allows the parties to avoid the political risk borne by traders in SFE electricity futures, creating a significant difference between these two forms of futures trade and undermining any presumption that arbitrage would lead to convergence in the prices of the two instruments.

In response to the first, the Commission is disposed to assume, for the purpose of determining regulated retail prices for electricity in the ACT for 2012–13, that a prudent retailer would make

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[23] Frontier Economics 2009.

use of carbon-exclusive contracts. The price at which it is to be assumed that those contracts were made is discussed further below.

While passage of the carbon price legislation has set in place prices on carbon for each financial year through to 30 June 2015, the possibility of an early election, coupled with a commitment by the leader of the opposition that an incoming Coalition government would remove the price on carbon, leaves some residual political risk for those trading electricity futures for 2013–14. Both the extent of that risk and its impact on patterns of trade in electricity futures are unclear at present. Accordingly, the Commission wishes to reserve its position on the approach to be taken to modelling the hedging behaviour of a prudent retailer for 2013–14, with a review of the situation, as described in chapter 3, to be undertaken closer to the time when this determination must be made.

With regard to the prices at which the hedge contracts are made, the first point is that the Commission is interested in the total price paid under the contract. For a carbon-exclusive contract that would include, therefore, the contingent, carbon price adjustment portion of the price. For the purposes of determining retail prices for 2012–13, the Commission is disposed to assume that the carbon price that will be relevant for contracts including the AFMA ACB addendum is $23 per tonne of CO_2-e.

The Commission considers that it has two options for estimating this contract price:

- Continue to use data drawn from SFE futures market, but select a period over which the risk exposures of traders in this market are similar to those for parties to carbon-exclusive OTC contracts.
- Use data from one of the services monitoring trades in the OTC market, including carbon-exclusive trades, to measure OTC contract prices directly.

In pursuing the first option, the Commission would be assuming that passage of the legislation had removed most of the political risk as far as trades for 2012–13 were concerned and that, therefore, SFE futures prices for the subsequent period would track carbon-exclusive contract prices inclusive of a carbon price adjustment based on a carbon price of $23 per tonne of CO_2-e.

This approach has two obvious drawbacks. The period over which price data would be collected would be restricted to about six and a half months and the Commission accepts that hedging for 2012–13 has been occurring for longer than that, including through the use of carbon-exclusive contracts. Second, it is not entirely clear that the residual political risk for 2012–13, as discussed above, is now small enough to be neglected.

The difficulties with the second option are the familiar ones that the Commission has identified previously in connection with the use of price data from non–exchange traded sources: lack of transparency, uncertainty that prices presented are representative and so on. That said, for the reasons cited above, the Commission has reservations about using SFE futures data in current circumstances. Accordingly, the Commission is currently examining the feasibility of using data on OTC trades drawn from ICAP as suggested in some of the submissions discussed earlier in this section.

It has not, however, been possible to complete that work in time for this draft report. The draft determination in this draft report is, therefore, based on a contract price determined from the SFE futures data relating to trades made after the passage of the carbon price legislation. On the basis of its preliminary examination of the ICAP OTC data, the Commission does not believe that the use of that data in place of the SFE futures data will lead to radical changes in the cost index and therefore to the determination of regulated retail electricity prices for 2012–13.

3 Analysis of efficient costs

This chapter discusses:

- the methodology adopted by the Commission in determining the regulated retail price
- the individual cost elements that contribute to the regulated retail price
- the requirements of section 20 of the ICRC Act.

The chapter concludes with a section that brings together the Commission's draft decision on each of the cost elements and sets out the proposed change in the regulated retail price.

3.1 Methodology

The Commission determines a default retail electricity price for small customers who elect not to seek a negotiated contract with ActewAGL Retail or another retailer. The Commission determines the extent to which standard contract customer tariffs can be increased over those in the previous year. It does this by estimating the economically efficient cost base of an incumbent electricity retailer providing retail electricity supply services to customers on standard contracts. The individual cost components are discussed in detail in section 3.2.

In estimating the individual cost components, the Commission draws on benchmark cost information available in the marketplace, other regulatory decisions within the retail electricity sector in Australia and information provided by ActewAGL Retail.

This index-based approach can be thought of as similar to the way in which the Australian Bureau of Statistics (ABS) compiles the consumer price index (CPI). The ABS selects a basket of goods and assigns relative weightings to each of the items. The CPI then measures how the cost of the basket of goods fluctuates over time.

The standard customer contract includes a suite of tariffs offered by ActewAGL Retail. Therefore, the Commission adopts a weighted average price cap. Under the cap, ActewAGL Retail is able to rebalance the individual tariffs offered to its standard-contract customers as long as the adjustment in the weighted average price does not exceed the percentage change in the overall price determined by the Commission.

The Commission then reviews the movement in the final suite of tariffs proposed by ActewAGL Retail to ensure that any adjustment in prices remains reflective of the movement in the regulated retail price as calculated by the Commission. The final approved retail tariffs that constitute the regulated retail price are then published by the Commission as a notifiable instrument.[24]

[24] The approved schedule of tariffs is attached to the standard customer contract. For example, see Utilities (Variation of Terms—ActewAGL Retail Standard Customer Contract) Approval Notice 2010 (Notifiable Instrument NI2011-290).

3.2 Retail electricity cost elements

The individual cost components that contribute to the overall retail cost of electricity can be grouped into the following categories:

- energy costs
  - energy purchase costs
  - energy contracting costs
  - green costs
  - energy losses
  - NEM fees
- retail costs
  - retail operating costs
  - retail margin
- network costs
  - transmission and distribution network costs.

The remainder of this section discusses each of these elements in detail. Each cost element is discussed in terms of:

- its definition
- the methodology adopted in the 2010–12 draft decision
- any matters raised in submissions to the 2012–14 issues paper
- the methodology adopted for the 2012–14 draft decision
- the Commission's draft decision
- how the Commission has considered the requirements of section 20 of the ICRC Act in reaching its decision.

The cost build-up calculated in this chapter is for 2012–13. The arrangements for 2013–14 are discussed in chapter 4.

Energy purchase costs

Definition

EPC represent the costs incurred by the incumbent retailer in purchasing electricity from the market (that is, from electricity generators) to supply customers on regulated retail tariffs.

2010–12 methodology

The Commission revised its EPC model as part of the 2010–12 price determination. In developing the model the Commission released a technical paper.[25] The methodology outlined in the technical paper was that adopted in the Commission's most recent price determination.[26] The 2010–12 technical report and price determination should be consulted to gain a detailed understanding of the Commission's approach. The methodology developed in these reports is summarised below.

[25] ICRC 2010c.
[26] ICRC 2010b.

The EPC component calculation can be summarised as follows:

Energy purchase cost = FP × (LS + HC)

where FP is the forward price, LS is the load shape and HC are the hedging costs.

The forward price is determined using reported forward settlement prices for New South Wales base load electricity reported on the d-cyphaTrade website. The forward price is the numerical average of 23 months before the start of the financial year. For example, the 2012–13 financial year forward settlement price is calculated over the period 1 July 2010 through to 31 May 2012. Data is used up to 31 May given that the Commission must release its final price determination in sufficient time to allow ActewAGL to make necessary changes to its billing systems. Each of the quarters of the financial year is determined individually (for example, quarter 3 2012, quarter 4 2012, quarter 1 2013 and quarter 2 2013).

The load shape is calculated by means of the following steps:

- The load shape is the ratio of the load-weighted spot price to the time-weighted spot price.
- Half-hourly spot prices for the New South Wales region and the net system load profile for the ACT as published on the Australian Energy Market Operator (AEMO) website will be used (net system load profile data is available from 1 July 2003).
- The ratio is calculated for each financial year separately, and then the grand average is calculated as the average of these annual ratios.
- Data from the longest available time period (that is, commencing 1 July 2003) is used and the period is extended every year to include the most recent financial year, using all available data up to 30 June of that year or as close as practical to this date (which is expected to be 15 June of the relevant year).

The HC is calculated by the following formula:

$$\mathrm{HC} = 0.5 \times \left(\mathrm{LR} + 0.1 - \mathrm{LS}\right)$$

There are three parts to the calculation of the hedging cost: the load ratio (LR), which is the maximum value of the observed ratio of the maximum load to the average load plus an adjustment due to the fact that the observed maximum may be less than the true maximum; the LS; and the percentage mark-up of the forward price to the spot price (estimated at 5%).

Matters raised in submissions on the issues paper

The key outstanding issue with respect to the EPC component as identified by ActewAGL Retail related to the current annual averaging approach adopted in the calculation of the load shape. In its issues paper, the Commission suggested moving to a quarterly approach to the calculation of the load shape, to which ActewAGL Retail responded:

> The second question asked by the Commission in the issues paper is whether the wholesale EPC model can be improved, with the Commission's discussion focussing on the other major component of the EPC model: the Load Shape (LS) coefficient.
>
> LS is used to estimate the efficient hedging costs of a prudent retailer. The Commission presents a sound case for it to be calculated quarterly rather than on a financial year basis.

ActewAGL notes that this minor change would:

- address the inconsistency in evaluation time periods within the EPC model; and
- at least theoretically, improve the accuracy of the Commission's model.[27]

Proposed 2012–14 methodology

In chapter 2 of this report, the Commission identified that the methodology for determining ActewAGL Retail's franchise customer tariffs would be based on:

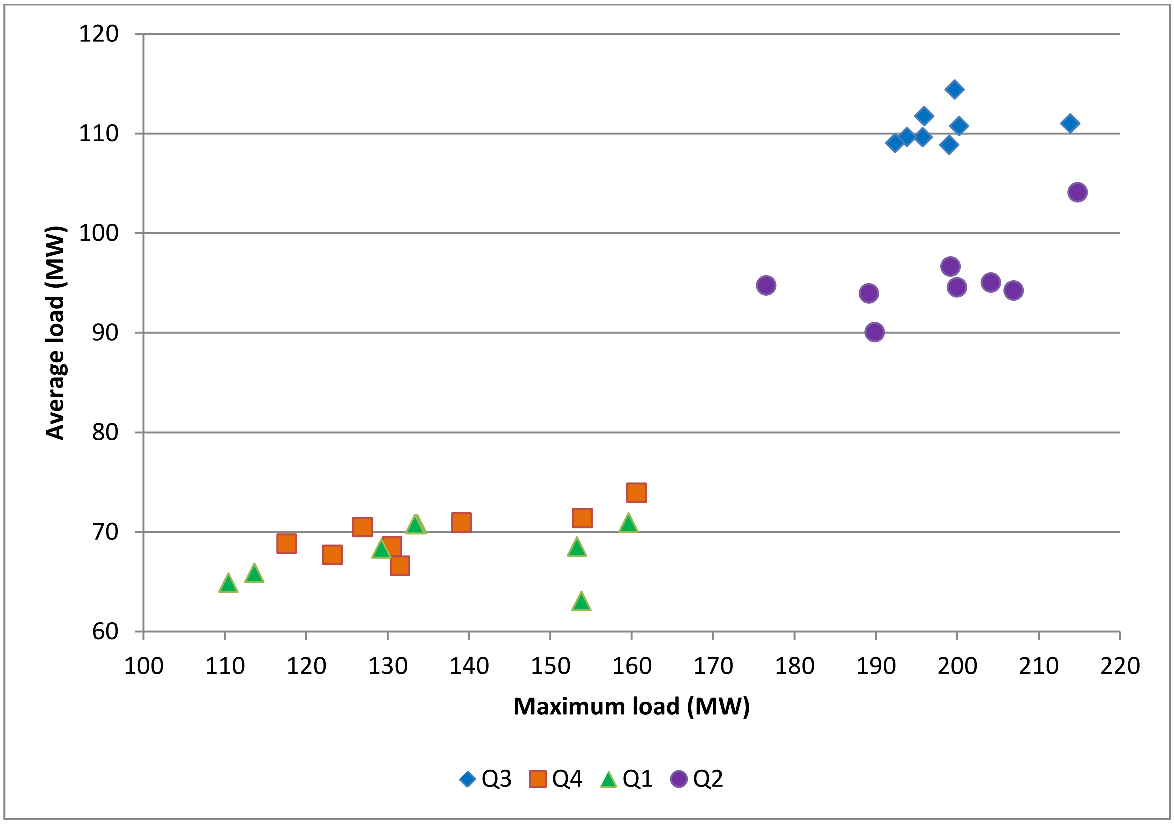
- determining the costs that would be incurred by an incumbent retailer
- maintaining the use of a cost index approach
- addressing the introduction of a price on carbon within the confines of the existing EPC component using SFE exchange-traded data.

The only outstanding issue relates to a refinement of the model to include a quarterly approach to the calculation of the load shape and hedging costs. The approach whereby the Commission undertakes technical refinements to the existing model is consistent with the approach it has taken previously as part of each price determination process.

The calculation of quarterly load shapes and hedging costs would allow the Commission to determine the energy purchase cost on a quarterly basis and weight the quarterly energy purchase cost to determine the annual energy purchase cost. The motivation for moving to a quarterly model for determining the energy purchase cost comes from examining the average and maximum quarterly loads over the past eight years. Figure 3.1 shows a scatter diagram reproduced from the issues paper which demonstrates that the average load as well as variation in the maximum load is different across quarters.

[27] ActewAGL Retail 2012, p. 11.

Figure 3.1 Scatter diagram—average load to maximum load



As can be seen in Figure 3.1, the average load is higher in the second and third quarters as compared to the first and fourth quarters. There is also evidence of reduced variability in the level of the maximum load in the third quarter. It should be noted that futures contracts for electricity sold on the SFE as reported on the d-cyphaTrade website are quarterly as well.

In response to the issues paper, ActewAGL Retail supported such an approach on the basis that it addressed an inconsistency in the model and theoretically improved the accuracy of the model.[28]

Based on its analysis and the comments from ActewAGL Retail, the Commission considers it appropriate to move to a quarterly load shape calculation rather than retain the existing annual averaging approach, thus aligning its methodology for determining the forward price with the load shape and the hedging cost components of its model.

Tables containing the load shape, maximum to average load ratio, and average load for each quarter can be found in the draft decision section below.

[28] Ibid., p. 11.

Draft decision

As described above, the Commission needs to determine the forward price, load shape and hedging cost under the Commission's methodology for 2012–13.

Tables 3.1, 3.2 and 3.3 present the load shape, the maximum load to average load ratio and the average load calculated for each quarter where data is available from 2003–04 through 2011–12 (data is incomplete for quarter 4 2011–12 and will not be available for quarters 1 and 2 2011–12 until after release of the final report). The source data used to calculate these statistics is the net system load profile for the ACT as reported by AEMO and the spot electricity prices as reported by AEMO.[29]

Table 3.1 Quarterly load shape, 2003–04 through 2011–12

Year	Q3	Q4	Q1	Q2
2003–04	1.251	1.043	1.192	1.104
2004–05	1.148	1.164	1.207	1.082
2005–06	1.114	1.149	1.360	1.145
2006–07	1.161	1.080	1.207	1.387
2007–08	1.134	1.075	1.105	1.100
2008–09	1.123	1.096	1.294	1.119
2009–10	1.086	1.254	1.254	1.109
2010–11	1.067	1.024	1.561	1.036
2011–12	1.047	1.092		
Average 2003 through 2011	1.136	1.111	1.231	1.150
Average 2003 through 2012	1.126	1.109	1.273	1.135

Table 3.2 Quarterly maximum load to average load ratio, 2003–04 through 2011–12

Year	Q3	Q4	Q1	Q2
2003–04	1.786	2.156	1.702	2.013
2004–05	1.828	1.905	1.724	2.108
2005–06	1.808	1.960	1.888	2.063
2006–07	1.768	1.801	1.885	2.148
2007–08	1.927	1.708	1.891	1.863
2008–09	1.746	1.821	2.250	2.061
2009–10	1.764	2.172	2.236	2.196
2010–11	1.754	1.975	2.440	2.115
2011–12	1.868	2.017		
Maximum 2003 through 2011	1.927	2.172	2.250	2.196
Maximum 2003 through 2012	1.927	2.172	2.440	2.196

[29] The data is freely available on the AEMO website: www.aemo.com.au.

Table 3.3 Average load, 2003–04 through 2011–12 (MW)

Year	Q3	Q4	Q1	Q2
2003–04	109.62	71.38	64.91	93.95
2004–05	108.85	68.53	65.91	90.06
2005–06	110.76	70.95	70.79	104.10
2006–07	109.66	70.49	70.77	95.03
2007–08	111.00	68.84	68.34	94.74
2008–09	114.40	67.69	70.95	96.66
2009–10	109.03	73.94	68.54	94.25
2010–11	111.75	66.59	63.06	94.55
2011–12	102.11	66.05		
Average 2003 through 2011	110.63	69.80	68.60	95.54
Average 2003 through 2012	109.69	69.39	67.91	95.42
Load weights 2003 through 2011	0.321	0.203	0.199	0.277
Load weights 2003 through 2012	0.320	0.203	0.198	0.279

Table 3.4 shows the FP for each quarter for 2011–12 and 2012–13.

Table 3.4 Forward prices, 2011–12 and 2012–13 ($/MWh)

Year	Q3	Q4	Q1	Q2
2011–12	39.39	41.36	50.07	35.71
2012–13	55.54	56.57	68.89	55.46

Table 3.5 shows the recalculation of the quarterly EPC for 2011–12, given the technical refinements to the methodology.

Table 3.5 Quarterly energy purchase cost, 2011–12

Components	Q3	Q4	Q1	Q2
Forward price ($/MWh) (A)	39.29	41.36	50.07	35.71
Load shape (%) (C)	1.136	1.111	1.231	1.150
Maximum load to average load ratio	1.927	2.172	2.250	2.196
Hedging cost (%) (D)	0.045	0.058	0.056	0.057
Forward price uplift factor (B=C+D)	1.180	1.169	1.287	1.207
Energy purchase cost ($/MWh) (A×B)	46.37	48.34	64.46	43.09

Table 3.6 shows the calculation of the quarterly EPC for 2012–13.

Table 3.6 Quarterly energy purchase cost, 2012–13

Components	Q3	Q4	Q1	Q2
Forward price ($/MWh) (A)	55.54	56.57	68.89	55.46
Load shape (%) (C)	1.126	1.109	1.273	1.135
Maximum load to average load ratio	1.927	2.172	2.440	2.196
Hedging cost (%) (D)	0.045	0.058	0.063	0.058
Forward price uplift factor (B=C+D)	1.171	1.167	1.336	1.193
Energy purchase cost ($/MWh) (A×B)	65.03	66.01	92.03	66.19

Based on application of the quarterly weights to the quarterly EPC, the overall EPC for 2011–12 is $49.46/MWh.

Based on application of the quarterly weights to the quarterly EPC, the overall EPC for 2012–13 is $70.91/MWh.

Section 20 requirements

The Commission has adopted an approach based on independent and verifiable market data and a range of assumptions based on industry standards to provide a reasonable estimate of the cost of purchasing wholesale energy from a competitive market pool. In developing this approach, the Commission has applied a methodology that it considers provides appropriate weight to the social imperatives of the provision of reliable electricity to franchise customers (ICRC Act, ss. 20(2)(b) and (g)), the reduction of market power through the setting of the lowest efficient prices in an open market pool (ss. 20(2)(a), (c), (h), (i) and (k)), and the need for the financially sustainable continuation of the regulated price offer by the incumbent retailer in the ACT (ss. 20(2)(d), (e), (i) and (j)). The methodology also improves the valuation and pricing of environmental resources consistent with the principles of ecologically sustainable development (s. 20(2)(f)).

Energy contracting costs

Definition

Energy trading and management costs represent the costs incurred by the incumbent retailer in managing an energy trading desk. An energy trading desk is necessary to manage electricity purchases, which are typically bought using a forward-looking portfolio approach, and the associated financial risks.

2010–12 methodology

In its 2010–12 price determination the Commission adopted the methodology whereby the allowance for energy trading and management costs was adjusted by CPI. The Commission calculated a CPI figure using the following formula, populated using the ABS All Groups Index for the weighted average of eight capital cities:

$$CPI_t = \frac{CPI_{March(t-2)} + CPI_{June(t-2)} + CPI_{Sept(t-1)} + CPI_{Dec(t-1)}}{CPI_{March(t-3)} + CPI_{June(t-3)} + CPI_{Sept(t-2)} + CPI_{Dec(t-2)}} - 1$$

The formula produced a CPI figure of 1.82% applied in 2010–11 and 2.85% applied in 2011–12. This resulted in an allowance of $0.76/MWh (0.75 × 1.0182) and $0.78/MWh (0.76 × 1.0285) for energy trading and management costs for 2010–11 and 2011–12, respectively.

Matters raised in submissions on the issues paper

No submissions were received that proposed an adjustment to this methodology.

2012–14 proposed methodology

The Commission considers it appropriate to retain the methodology whereby the allowance for energy contracting costs is adjusted by CPI. The Commission has calculated a CPI figure of 3.39% to apply in 2012–13, using the formula set out above. Applying the CPI to energy trading and management costs results in an allowance of $0.81/MWh (0.78 × 1.0339).

Draft decision

The Commission's draft decision is to grant an allowance of $0.81/MWh for energy trading and management costs for 2012–13. This is based on an adjustment of the 2011–12 cost allowance for movements in the CPI (0.78 × 1.0339).

Section 20 requirements

The recovery of costs associated with energy hedging, contract and management requirements meets the economic efficiency objective in s. 20(2)(c), as well as the cost-recovery provisions of s. 20(2)(e).

Green costs

Definition

ActewAGL Retail incurs costs in meeting environmental obligations imposed by the Australian Government and the ACT Government. These costs are termed 'green costs' and consist of measures such as the Australian Government's enhanced Renewable Energy Target (RET), which consist of a Large-scale Renewable Energy Target (LRET) and a Small-scale Renewable Energy Scheme (SRES), and costs incurred by electricity retailers from the ACT Government's feed-in tariff scheme.[30] Legislation mandating targets for the reduction of carbon emissions from household energy efficiency measures is currently before the ACT Legislative Assembly. If this legislation is passed by the Legislative Assembly, the scheme will commence on 1 January 2013. Costs arising from the commencement of the Australian Government's carbon pricing mechanism on 1 July 2012 are not included under the green cost component for the cost build-up. The impact of the carbon price on the wholesale electricity cost is included in the EPC component.

2010–12 methodology

The Commission in its 2010–11 final decision incorporated cost estimates on the RET and Greenhouse Gas Abatement Scheme provided by ActewAGL Retail.[31] As required under the final decision, ActewAGL Retail submitted updated green costs for the 2011–12 price reset and a commentary and green cost model to explain its forecast green costs. The 2011–12 price reset took into account changes to ActewAGL Retail's estimates arising from the introduction of the enhanced RET on 1 January 2011. At that time the Commission rejected ActewAGL Retail's

[30] Green costs have previously also included the ACT Government's Greenhouse Gas Abatement Scheme, which will cease to operate when the Australian Government's carbon pricing mechanism commences on 1 July 2012.
[31] ICRC 2010b, p. 35.

forecast for large-scale generation certificate (LGC) prices, and instead adopted a market approach based on the LGC spot price and an allowance for holding costs averaged over the year.[32] The price of small-scale technology certificates (STCs) was set at $40 per STC, which is the price offered through the Office of the Renewable Energy Regulator's (ORER) Clearing House.

Matters raised in submissions on the issues paper

The following submissions were received on the green costs.

ActewAGL Retail

ActewAGL Retail's submission raised several matters:

- The anticipated incurrence of significant costs under the RET, ACT feed-in tariff and an ACT energy efficiency scheme, and the need for associated price adjustments for a previous year should be included in the following year's determination of green costs.
- The pass-through mechanism should be retained to account for discrepancies in estimates of the Renewable Power Percentage (RPP) and the Small-scale Technology Percentage (STP) used to determine obligations under the LRET and SRES, respectively.
- An adjustment for LRET and SRES costs incurred in 2011–12 should be applied in the 2012–13 determination together with the provision of an adjustment for the time value of money.
- The price of STCs should be set at $40 per certificate.
- The Commission should use the long-run marginal cost (LRMC) of large-scale renewable generation as a proxy for the LGC price, based on the widespread use by retailers of power purchasing agreement with renewable energy projects. ActewAGL Retail proposed that if the Commission continues to use a market approach, the LGC price should be derived from publicly available closing prices traded in a liquid market.
- In addition to an allowance of 10% for the recovery of LGC and STC holding costs, an additional 7.5% should be allowed to cover volume risk, liquidity risk, delivery risk and regulatory risk.

AGL Energy Ltd

AGL Energy Ltd proposed that the method for determining the cost of LGCs be based on either a LRMC approach or a sample of LGC prices that reflect a retailer's approach to hedging its liability under the LRET.

Origin Energy Retail Ltd

Origin Energy Retail Ltd suggested that green costs should be consistent with those for a new-entrant retailer and that their calculation should be transparent to allow stakeholder scrutiny.

Proposed 2012–14 methodology

The Commission will allow ActewAGL Retail to make an application for green costs incurred in complying with obligations under Australian Government and ACT Government environmental schemes, including an ACT energy efficiency scheme and the feed-in tariff.

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[32] ICRC 2011a, pp. 7–8.

The Commission will continue to require ActewAGL Retail to submit an annual estimate of the cost of complying with the RET based on estimates of the RPP and STP, and provide explanatory information for consideration and verification. No allowance will be made for the time value of money of any adjustment to RET compliance costs for the previous year.

The Commission has not at this time been given a convincing argument for adopting LRMC as a proxy for the LGC price. It therefore intends to base the price of LGCs on publicly available market data and include an allowance for funding costs as it did in the 2011–12 price reset. The Queensland Competition Authority bases its estimate of LRET costs on weekly market prices using data available from the AFMA.[33] Since the 2011–12 price reset the Commission has monitored the indicative spot prices for LGCs and STCs that are publicly available from intermediaries. Given the levels at which STCs are trading in the market, the Commission does not consider it appropriate to base the STC price on the $40 per certificate price available from the ORER Clearing House. For the purpose of transparency, the Commission will determine the prices of LGCs and STCs as the average closing spot price for each of the last five business days in the month of May preceding the price direction as reported on the Clean Energy Council's website.[34] An allowance of 10% per year for holding costs will be provided.

The cost of the SRES is calculated using ORER's actual and estimated STP for 2012 and 2013, respectively.

The under-recovery of costs under the RET for 2011–12 is included as a cost pass-through in the 2012–13 price determination.

The Commission finds no reasonable justification for including an additional allowance for volume risk, liquidity risk, delivery risk and regulatory risk.

Draft decision

The Commission's draft decision is to adopt an allowance for green costs in 2012–13 of $10.88 that includes an adjustment of $1.52 for the under-recovery of costs in 2011–12. To determine the green costs associated with the RET, the Commission has adopted a method based on publicly available information of spot prices for LGCs and STCs that includes an allowance for relevant holding costs. The Commission is prepared to reconsider the reasonableness of this approach, and consider alternatives, if it is provided with evidence to the contrary.

For the purpose of the draft decision, LGC prices inclusive of holding costs for 2012 and 2013 are $40.01 and $41.91, respectively. The STC price inclusive of holding costs for 2012 is $30.50, and the 2013 price is $31.97. The RPP and STP for 2012 are 9.15% and 23.96%, respectively, as reported by ORER.[35] The 2013 estimate of the RPP is 9.80% and the STP estimate is 7.87%.

Section 20 requirements

The Commission considers that an allowance for green costs is consistent with s. 20(2)(f), which requires the Commission to have regard to the principles of ecologically sustainable development. The green costs reflect to some extent the environmental costs incurred in the consumption of electricity that the Australian Government and ACT Government consider should be passed through to consumers. In addition, including an allowance for green costs on a cost-recovery basis (s. 20(2)(e)) ensures that consumers are protected from the potential misuse of monopoly power (s. 20(2)(a)).

[33] QCA 2011, p. 30.
[34] The Clean Energy Council's website is at www.cleanenergycouncil.org.au. If publicly available prices are not available from this source, a suitable alternative will be used.
[35] ORER 2012.

Energy losses

Definition

Electricity is often generated far from where it is consumed. Only 2% of the electricity consumed in the ACT is produced within the territory; the remaining 98% is sourced from various generators along the east coast of Australia.

The transportation of electricity through transmission and distribution networks inevitably results in some energy loss. That loss imposes a cost on the retailer, as it must purchase more electricity than it is able to sell.

2010–12 methodology

In its 2010–12 price determination, the Commission calculated energy losses based on a combination of distribution and transmission losses. The loss factors are calculated by AEMO and are used by all regulators to determine the energy loss allowances where regulated tariffs still apply. The following formula calculates the total losses:

Total losses = (1 + distribution losses) × (1 + transmission losses)

The 2011–12 distribution loss factor for ActewAGL Distribution’s low-voltage connection, as cited on page 19 of AEMO’s *Distribution loss factors—2011–12 financial year*, is 1.0499 or 4.99%.

The 2011–12 marginal loss factor—that is, transmission loss factor—for the Canberra 132 kV connection point, as cited on page 33 of AEMO’s *List of regional boundaries and marginal loss factors for the 2011–12 financial year*, is 1.0003 or 0.03%.

This methodology resulted in a loss allowance of 5.02% (1.0499 × 1.0003).

Matters raised in submissions on the issues paper

No submissions were received that proposed an adjustment to the 2012–14 methodology.

2012–14 proposed methodology

The Commission proposes to use the same methodology that was applied in 2010–12. AEMO is expected to release the 2012–13 distribution and transmission loss factors in April 2012. Therefore, the draft decision uses the 2011–12 financial year loss allowance of 5.02% (1.0499 × 1.0003).

Draft decision

The Commission’s draft decision is to allow for energy losses of 5.02%, pending the release of the 2012–13 loss factors from AEMO.

Section 20 requirements

The Commission notes that the recovery of these energy losses meets the objectives of ss. 20(2)(d), (e), (h) and (i) by ultimately requiring customers to pay for the energy they consume. As this approach to energy losses in the distribution and transmission system is mandated in the NEM framework, it also meets the objectives of s. 20(2)(k).

National Electricity Market fees

Definition

The NEM is the interconnected electricity grid that covers most parts of Queensland, New South Wales, the ACT, Victoria, Tasmania and South Australia. The NEM is managed by AEMO, which is funded via user fees that are ultimately borne by customers. The fees cover a range of functions provided by AEMO that are necessary for the safe and reliable delivery of electricity to all consumers.

The NEM fees take into account NEM participant fees and ancillary services charges paid by retailers. This is consistent with the approach followed in New South Wales and Queensland.

2010–12 methodology

In its 2010–12 determination, the Commission adopted a methodology in which the allowance for NEM fees was calculated based on an adjustment to the 2010–11 figure by the CPI. The Commission calculated a CPI figure of 2.85%. This resulted in an allowance of $0.78/MWh (0.76 × 1.0285) for NEM fees for 2011–12.

Matters raised in submissions on the issues paper

No submissions were received that proposed an adjustment to the 2012–14 methodology.

2012–14 proposed methodology

The Commission proposes the continuation of the 2010–12 methodology in which the final allowance from 2011–12 is adjusted by the CPI.

Draft decision

The Commission's draft decision is to adopt an allowance for NEM fees of $0.81/MWh. This is based on an adjustment of the 2011–12 cost allowance for movements in the CPI (0.78 × 1.0339).

Section 20 requirements

The Commission considers that the recovery of NEM fees meets the objective of ss. 20(2)(d), (e) and (i). The payment of ancillary services fees assists AEMO in providing for safe and reliable delivery of electricity to all consumers (s. 20(2)(b), while securing efficiencies through competition (s. 20(2)(c)).

Retail operating costs

Definition

Retail operating costs are the costs incurred by the incumbent retailer in providing retail services to regulated customers. These costs include:

- billing services, including meter reading
- call centre costs
- customer information costs (including sales and marketing costs)
- general operating overhead costs.

In chapter 2 the Commission noted that it considered the appropriate regulatory benchmark to be that of an incumbent retailer providing retail services to customers on a regulated tariff. Based on this decision, the inclusion of an allowance for CAC or CARC is not appropriate.

2010–12 methodology

The methodology used to calculate retail operating costs has remained consistent over previous years as the Commission has adjusted the allowance granted in the prior year for movements in inflation. That is, the $10.86/MWh for 2011–12 was the 2010–11 figure of $10.56/MWh adjusted for inflation.

Matters raised in submissions on the issues paper

The submissions from electricity retailers called for the inclusion of an allowance for CAC or CARC.

2012–14 proposed methodology

The Commission has addressed the inclusion of CAC or CARC in chapter 2. For the reasons set out in chapter 2, and in the absence of any further detailed analysis or empirical evidence that demonstrates an overall increase in economic efficiency from the inclusion of a CAC or CARC allowance, the Commission considers it appropriate to continue with the existing methodology.

Draft decision

The Commission's draft decision is to adopt an allowance for retail operating costs of $11.23/MWh. This is based on an adjustment of the 2011–12 cost allowance of $10.86/MWh for movements in the CPI (10.86 × 1.0339).

Section 20 requirements

The Commission considers that the allowance granted for retail operating costs is a reasonable balance between the need to allow cost recovery (s. 20(2)(e)) and the need to require the incumbent to operate efficiently (s. 20(2)(c)). In addition, the Commission has had regard to the social impacts of its decisions (s. 20(2)(g)) by not including a customer acquisition cost on the basis that such a cost is unnecessary to encourage competition.

Retail margin

Definition

The retail margin represents the return the incumbent retailer earns on the investment it must undertake to provide retail services. Without a retail margin, the incumbent retailer would be unable to attract the funds needed to provide those services. In addition, a retail margin, together with an allowance for other legitimate costs of providing the retail service, allows room for other retailers to enter the market and competitively offer alternative electricity supply contracts, assuming they can operate more efficiently or achieve other economies (including savings on the retail margin) that can be passed through to customers in the form of lower prices.

The retail margin has historically been applied on an earnings before interest, taxes, depreciation and amortisation (EBITDA) basis—that is, it implicitly includes an allowance for depreciation, which is not explicitly included in the cost to serve.

2010–12 methodology

In its 2010–12 final decision, the Commission increased the retail margin from 5.0% to 5.4%. This followed on from an increase from 3.0% (as applied from 2003–04 to 2006–07) to 4% (as applied in 2007–08) to 5% (as applied in 2008–09).

The decision to increase the retail margin to 5.4% from 1 July 2010 was based on the Commission's view that it was appropriate to apply the analysis undertaken by the Independent Pricing and Regulatory Tribunal of New South Wales (IPART). IPART engaged the Strategic Finance Group (SFG) to investigate the appropriate level of retail margin for a retail electricity business.

SFG developed three approaches aimed at estimating the retail margin. Table 3.7 shows the outcome of these approaches.[36]

Table 3.7 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
SFG's recommended range	4.8	6.0	5.4

IPART adopted an approach based on the average of the mid-points of the three approaches. The Commission considered the analysis and considered it appropriate to adopt the same approach to determining an appropriate retail margin for ActewAGL Retail in the ACT.

Matters raised in submissions on the issues paper

The ACT Civil and Administrative Tribunal stated that:

> In relation to retail operating costs, the Tribunal opposed the increase in 2010–11 and recommends that element be more fully explored in the draft report with a view to returning it to 5%.[37]

ActewAGL Retail argued as follows:

> The retail margin represents the return that a retailer requires in order to attract the necessary capital to provide retail services. The retail margin should be commensurate with risks associated with providing retail energy services and should reflect the systematic risk faced by retailers.
>
> In its 2010–11 decision, the Commission took into account the analysis on the retail margin carried out by the Strategic Finance Group (SFG) for IPART's NSW review, and determined that the retail margin in the ACT would be increased from 5.0 per cent to 5.4 per cent.
>
> In determining this retail margin, the Commission decided to give equal weight to the three approaches applied by SFG, in this way mirroring the approach taken by IPART with respect to the NSW retailers. However, IPART in addition determined a substantially higher energy purchase cost allowance for NSW retailers than that allowed to ActewAGL by the ICRC (IPART minimised the risks to NSW retailers by using LRMC as a floor for the EPC).
>
> Had the Commission applied the NSW approach to determining energy purchase costs, it might then have been valid to apply the NSW approach to determining the margin. However, the Commission uses a market based approach to determining the energy purchase costs and should therefore apply a market based retail margin.
>
> The SFG report shows that eight energy retail business segments in Australia, comprising 20 data points in each case, had a median EBITDA margin of 5.9 per cent. Using the international sample of 269 firms (in Australia, United Kingdom and the United States) the EBITDA margin estimated by SFG is 6.4 per cent to 6.9 per cent with a mid-point of 6.7 per cent.

[36] ICRC 2010b, p. 43.
[37] ACAT 2012, p. 1.

> Based on this information, ActewAGL maintains that a margin of at least 6 per cent is required to provide retailers with commercially adequate returns consistent with market benchmarks.[38]

AGL Energy suggested that the:

> retail margin should be viewed in the context of the overall approach of setting regulated prices. On this basis, it is not appropriate to use a direct comparison with other jurisdictions (i.e. NSW) to establish whether the proposed margin is adequate.[39]

The Energy Supply Association of Australia argued that the Commission should:

> include an appropriate retail margin commensurate with the risks that a retail business faces.[40]

Origin Energy stated:

> It is noted that the ICRC believes a 5.4 per cent margin is sufficient and aligns with other regulatory benchmarks specifically referring to the NSW regulatory decision. Origin strongly believes a higher margin is appropriate for certain regulatory frameworks. Unlike the ACT, the NSW retail pricing determination provides greater certainty and mitigation of wholesale risk by using the LRMC of generation as the floor for wholesale energy costs.
>
> Markets that rely on artificial market based models add further uncertainty and greater risk for second tier retailers. These risks are further amplified by the carbon uncertainty in 2012–13. Accordingly, Origin believes the margin of 5.4 per cent should be escalated to take into account the differences in wholesale risk unless the ICRC applies an appropriate wholesale risk premium to the energy cost allowance.[41]

2012–14 proposed methodology

In the issues paper the Commission stated its preference to maintain the existing approach in the absence of compelling evidence causing the Commission to reconsider its position. The main issue raised in the submissions, brought forward by both ActewAGL Retail and Origin, was that it is inappropriate to adopt IPART's approach given the different methodologies used by IPART and the Commission to calculate the energy purchase cost component—IPART adopts an LRMC approach whereas the Commission uses actual market data.

It is important to note that the approaches adopted by IPART and the Commission are aimed at achieving the same outcome. That is, both approaches are aimed at determining what each regulator considers to be the prudent and efficient cost of sourcing electricity to serve customers on regulated tariffs. Therefore, the Commission does not accept that the difference in the manner in which the wholesale energy cost is calculated is relevant to the calculation of an appropriate retail margin.

Moreover, the Commission has proposed a range of modifications to the manner in which the EPC component is calculated. These changes have been proposed to specifically address the impact of the price on carbon on wholesale electricity prices and the subsequent costs (including risks) faced by ActewAGL Retail. The Commission considers the approach taken to be conservative and as such does not consider arguments regarding increased risks associated with the wholesale market to be substantiated.

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[38] ActewAGL Retail 2012, p. 21.
[39] AGL 2012, p. 4.
[40] ESAA 2012, p. 3.
[41] Origin Energy 2012, p. 5.

Therefore, it is the Commission's view that in the absence of specific analysis from ActewAGL Retail demonstrating the appropriateness of an increased retail margin, the Commission maintains its preference to adopt a retail margin of 5.4%.

Draft decision

The Commission has considered submissions made in response to the issues paper. Based on this consideration it considers it appropriate to maintain the existing retail margin of 5.4%.

Section 20 requirements

The Commission believes this approach meets the objectives of s. 20(2)(d), to allow an appropriate return on investment, and s. 20(2)(i), to meet the borrowing, capital and cash flow requirements of the business.

Network costs

Definition

Transmission and distribution network costs are the costs paid by the retailer to transport electricity over the transmission and distribution networks.

2010–12 methodology

ActewAGL Retail submitted network costs of $77.17/MWh for 2011–12 for the regulated retail electricity load, representing an 8.02% increase. The Commission determined that this amount was consistent with previous determinations of this cost component.

Matters raised in submissions on the issues paper

No submissions were received that proposed an adjustment to the 2012–14 methodology.

2012–14 proposed methodology

The Commission expects that the Australian Energy Regulator (AER) will approve ActewAGL Retail's submitted network costs for 2012–13 in June 2012. This will include a real annual increase of 4% as stipulated in the AER's April 2009 final decision on distribution network charges for 2009–14, as well as any transmission costs and additional cost pass-throughs.

The Commission anticipates a similar increase in network costs to that experienced in 2011–12. With this in mind, the Commission proposes to apply an 8.02% increase to the network costs from 2011–12, noting that the figure will be updated in the final report following the AER's release of the final determination of distribution costs.

Draft decision

For the draft report, the Commission has estimated network costs of $83.36/MWh for 2012–13 by applying the 2011–12 increase allowed by the AER. The final report will contain the updated AER network costs scheduled to be available in June 2012.

Section 20 requirements

The Commission believes that allowing the recovery of actual network costs incurred meets the objective of s. 20(2)(a) by protecting consumers from abuses of monopoly power, while at the same time accepting that the recovery of network cost pass-throughs is a legitimate activity for the retailer and meets the objectives of ss. 20(2)(c), (d), (e), (i) and (k).

3.3 Draft decision on cost elements

Table 3.8 sets out the Commission's draft decision on the cost components used to determine the change in the regulated retail price of electricity. The Commission's decision provides for a real increase in the regulated retail price of 13.37% and a nominal increase of 17.22%.

Table 3.8 Composition of regulated retail price for 2012–13 relative to 2011–12

	2011–12	2012–13	% change
Energy purchase costs ($/MWh)			
Electricity purchase cost ($/MWh)	49.46[a]	70.91	43.37
Energy contracting cost ($/MWh)	0.78	0.81	3.39
Green costs ($/MWh)	13.16	10.88	–17.33
NEM fees ($/MWh)	0.78	0.81	3.39
Energy losses (%)	5.02%	5.02%	–
Total energy purchase cost ($/MWh)	67.32	87.51	29.98
Retail operating costs ($/MWh)	10.86	11.23	3.39
Customer acquisition costs ($/MWh)	–	–	–
Total retail costs ($/MWh)	10.86	11.23	3.39
Network costs ($/MWh)	77.17	83.36	8.02
Total retail + energy + network costs ($/MWh)	155.35	182.10	17.21
Retail margin (EBITDA, % of sales)	5.40%	5.40%	–
Total cost ($/MWh)	163.74	191.93	17.22
X factor in CPI+X on MAR in $/MWh (%)		13.37%	

a. This figure has been recalculated from that contained in the 2011–12 price reset due to the adjustments in the calculation of the EPC component and the Commission's desire to maintain comparability across years under the index approach.

Note: EBITDA = earnings before interest, taxes, depreciation, and amortization; CPI = consumer price index; MAR = maximum allowable revenue.

4 Setting the regulated electricity price 2013–14

An adjustment to prices will be required from 1 July 2013 to ensure that they remain reflective of underlying costs. Annual adjustments to prices are common in regulated industries and have been implemented by the Commission in its previous decisions where they span more than single years. This included the most recent regulated electricity tariff determination, which saw an adjustment to prices on 1 July 2011.

In addition to any annual adjustments required as part of the normal mid-term review process, the Commission will in early 2013 undertake a major review of two components of the cost index. These components are the EPC and the cost impacts on ActewAGL Retail attributable to the ACT Government's energy efficiency scheme. In reviewing the EPC the Commission will include a particular focus on the forward price markets for wholesale electricity and how they are dealing with the carbon pricing mechanism and any related uncertainties.

The Commission will complete the reviews on which the 2013–14 regulated tariffs are based in sufficient time to allow ActewAGL Retail to implement the direction on new tariffs by 1 July 2013.

4.1 Review of energy purchase cost and ACT energy efficiency scheme

The process for the review will include releasing an issues paper, which may include one or more technical working papers, and draft and final reports. This process will allow ActewAGL Retail and other interested parties to make submissions on the Commission's findings before the final determination.

Energy purchase cost

In reviewing the EPC the Commission will assess the wholesale electricity spot market and forward market prices at this time, and determine whether any changes are required to the method and the basis for calculating the EPC to better represent the costs and risks faced by a prudent incumbent retailer under the carbon pricing mechanism. In considering the appropriate method to calculate the EPC cost the Commission will take into account the following factors:

- developments in the wholesale electricity market
- the appropriate type and source of data (for example, exchange-traded SFE data or over-the-counter ICAP data)
- the adequacy of data for the forward price averaging period, noting the Commission's preference for data from liquid markets
- any other technical refinements that may materially improve the calculation.

Energy efficiency scheme

The ACT Government's energy efficiency scheme is proposed to start on 1 January 2013. At the time of preparing the draft report, limited information is available as to the actual design of the scheme and hence the costs that ActewAGL Retail is likely to incur. However, the Commission considers that the following broad principles should be applied to the recovery of prudent and efficient costs:

- The initial inclusion of costs should occur from 1 July 2013 as part of the mid-term review.
- The calculation of costs to be included from 1 July 2013 should be based on an ex post assessment of costs incurred in administering the scheme from 1 January 2013 to 30 June 2013 (or as near as practicable) and an ex ante inclusion of costs as estimated to be incurred from 1 July 2013 to 30 June 2014. As such, 18 months of costs would be included in the regulated tariff in effect from 1 July 2013 to 30 June 2014.
- From 1 July 2014, annual adjustments should be made on the basis of ex ante estimates of the costs to be incurred over the following 12-month period.

The Commission will gather information on the impacts of the scheme on ActewAGL Retail during the first five months of 2013 and derive a method for calculating the scheme's cost. This method will then be used to estimate the scheme's costs for the 18 months from 1 January 2013 to 30 June 2014 and used to determine 2013–14 tariffs.

4.2 2013–14 methodology

Matters raised in submissions on the issues paper

ActewAGL Retail provided the following in its submission on the issues paper:

> ActewAGL believes that it would be appropriate to reapply the adjustment mechanism determined by the Commission for the 2011/12 mid-term review. This would be consistent with the Commission's overarching strategy of maintaining the current methodology and approach where possible.[42]

ActewAGL Retail went on to restate its preferred approach to calculating the individual cost components, which is discussed in detail in Appendix 3.

Proposed 2013–14 methodology

The Commission considers that the broad methodology adopted as part of the 1 July 2011 price adjustment should be retained in light of its effectiveness and the support for it by ActewAGL Retail, notwithstanding the Commission's view that a more detailed review of the EPC and ACT energy efficiency scheme is required.

The Commission proposes to adopt an approach for the mid-term price adjustment similar to that undertaken during 2011, which requires:

- ActewAGL Retail to submit to the Commission on or before 10 May 2013 the following information:
  - updated green costs for 2013–14
  - full accounting of all proposed pass-through costs
  - calculation of the CPI
- ActewAGL Retail to submit to the Commission for verification the updated transmission and distribution networks costs for the franchise customer load as soon as they are approved by the AER

[42] ActewAGL Retail 2012, p. 25.

- the Commission to determine the EPC component and the X factor for 2013–14
- the Commission to report its determination to ActewAGL Retail by 7 June 2013.

Table 4.1 shows the proposed mid-term price adjustment method from 1 July 2013.

Table 4.1 Proposed mid-term price adjustment method from 1 July 2013

Component	Method
Electricity purchase cost ($/MWh)	As determined by the review
Energy contracting costs ($/MWh)	0.81 × (1+CPI)
Green costs ($/MWh)	2013–14 estimates from ActewAGL, which are verified and applied using the Commission's methodology Energy efficiency costs as determined by the review
Energy losses (%)	Based on AEMO's estimates for 2013–14
NEM fees ($/MWh)	0.81 × (1+CPI)
Retail operating costs ($/MWh)	11.23 × (1+CPI)
Transmission and distribution network costs ($/MWh)	2013–14 as determined and approved by the AER and applied by ActewAGL Retail to the franchise customer load, and subsequently verified by the Commission
Cost pass-through	Cost pass-through proposed by ActewAGL Retail and approved by the Commission
Retail margin (% of sales)	5.4%

4.3 Draft decision

The Commission's draft decision is to adopt the approach as described above and detailed in chapter 6.

5 Pass-through arrangements

5.1 Definition

Pass-through arrangements are often included in regulatory decisions to allow a mid-year adjustment to prices if unforeseen events occur during the life of a price path. If a pass-through ‘trigger’ event occurs, a new investigation can be undertaken to update the prices or an automatic adjustment may be made.

Pass-through arrangements typically apply to events that are unforeseen, or whose extent is uncertain, and which are beyond the ability of the regulated entity to control. Therefore, the need for triggers increases with the length of the price path.

5.2 2010–12 methodology

The key elements of the pass-through arrangements set out on pages 67–68 of the 2010–12 regulatory determination are summarised below.

Timing of pass-through applications

ActewAGL Retail may make application to the Commission for a pass-through:

- when the Commission is establishing the X^t factor for 2011–12
- at any time during 2010–11 or 2011–12 (ActewAGL Retail may make a maximum of one application for a pass-through during each year).

The Commission may require ActewAGL Retail to make a negative pass-through.

Pass-through events

Regulatory change events and tax change events are pass-through events and may be the subject of a pass-through application by ActewAGL Retail or negative pass-through applied by the Commission.

Regulatory change event

A regulatory change event is a decision made on or after 11 June 2010 by any ‘Authority’ (any government or any minister, agency department, instrumentality or other authority of government and the Commission, the AEMC, the AER or AEMO) which has the extent of materially varying the nature, scope, standard or risk of providing services to regulated retail tariff customers, or the manner in which those services are provided. A regulatory change event includes obligations in respect of:

- any customer hardship program
- retailer of last resort events
- a green energy scheme, excluding the Carbon Pollution Reduction Scheme but including the Renewable Energy Target scheme
- changes in distribution or transmission charges.

A regulatory change event does not include obligations in respect of:

- any decision, determination or ruling in relation to energy loss factors
- changes to the ACT Government's feed-in tariff scheme in relation to the extension of that scheme to generators with a capacity greater than 30 kilowatts (kW)
- smart metering trials.

Tax change event

A tax change event means the imposition of a relevant tax, the removal of a relevant tax, or a change in the way a relevant tax is interpreted or calculated. A relevant tax is any tax, levy, impost, deduction, charge, rate, duty or withholding tax which is levied on ActewAGL Retail by any Authority (as defined above) and is payable by ActewAGL Retail, other than:

- income tax and capital gains tax
- stamp duty
- AEMO fees
- fees payable by ActewAGL Retail in respect of its retail licence
- penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax
- any tax that replaces or is equivalent or similar to any of the taxes referred to above (including any state-equivalent tax).

Materiality threshold

A pass-through will only be made where ActewAGL Retail incurs materially higher or lower costs in providing services to regulated retail tariff customers such that the aggregate impact of the pass-through event or events on costs is greater than 0.25% of ActewAGL Retail's revenue from regulated retail tariffs in the 12 months to March of the most recent year.

5.3 Matters raised in submissions on the issues paper

In response to the issues paper, ActewAGL Retail stated the following:

> ActewAGL believes that pass-through arrangements that applied from 2010–12 need to remain in place so that retailers do not bear the risk of unforeseeable or uncontrollable costs during the regulatory period. ActewAGL further supports the continued allowance for a mid-year pass-through adjustment in order to minimise the impact of cost changes on prices by distributing them among customers earlier and over a longer term.
>
> ActewAGL believes that the Commission should again allow pass-throughs for regulatory change and tax change events as defined in the 2010–12 final decision ... [43]

With respect to the regulatory change event, ActewAGL Retail stated that it expected that it would encompass obligations with respect to:

- any customer hardship program
- retailer of last resort events

[43] ActewAGL Retail 2012, p. 22.

- green energy schemes including the proposed ACT energy efficiency scheme and the Carbon Pricing Mechanism although these are dealt with in the green cost component of the TFT costs build-up ...
- changes in distribution or transmission charges although this is discussed as part of the TFT costs build-up in the relevant sections above
- changes to the ACT Government's feed-in tariff scheme in relation to the extension of that scheme to generators with a capacity greater than 30 kW.[44]

With respect to the tax change event, ActewAGL Retail stated that the definition in the 2010–12 determination remains relevant.[45]

ActewAGL Retail submitted the following with respect to the materiality threshold:

> For the 2010–12 period, the Commission adopted as a materiality threshold for pass through claims of 0.25 per cent of the previous year's revenue from franchise customers. ActewAGL maintains its position from the 2010–12 review that a materiality threshold is unnecessary since the administrative cost burden of applying to the Commission for recovery of a pass through amount provides sufficient incentive against ActewAGL seeking pass through unless costs are material. As all the proposed pass through events are related to events outside of ActewAGL's control, it would be unreasonable for a materiality threshold to apply such that ActewAGL is required to bear the risk and face a cost burden for material pass through events occurring in a fully open market environment.[46]

Origin Energy stated that:

> Origin supports a cost pass-through mechanism that allows for unexpected cost changes that meet a materiality threshold, as currently in place in the 2010–12 determination. In 2011 there were significant changes to the renewable energy scheme that precipitated a cost pass-through event. If the cost pass-through mechanism were not available in the 2010–12 determination then retailers would have had no choice but to absorb the costs associated with the legislative change implemented midway through the determination.[47]

5.4 Proposed 2012–14 methodology

It is the Commission's preference to maintain the existing pass-through arrangements as these have proved effective in the past. However, ActewAGL Retail has referred to three possible changes to the 2010–12 methodology. These are:

- a specific mention of the proposed ACT energy efficiency scheme
- inclusion of changes to the ACT Government feed-in tariff scheme in relation to extension of the scheme to generators with capacity greater than 30 kW
- removal of a materiality threshold.

ACT energy efficiency scheme

The ACT Government introduced to the Legislative Assembly on 22 March 2012 the Energy Efficiency (Cost of Living) Improvement Bill 2012. It is intended that the scheme be operational from 1 January 2013.

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44 Ibid.
45 Ibid., p 23.
46 Ibid., p 24.
47 Origin Energy 2012, p. 5.

ActewAGL Retail refers to the proposed ACT energy efficiency scheme and argues for its inclusion as part of the green cost component. The Commission accepts that there is likely to be an increased cost burden placed upon ActewAGL Retail as a result of the scheme. As such, the Commission considers it reasonable that ActewAGL Retail be able to recover the prudent and efficient costs incurred in administering the scheme for its regulated customer base.

The Commission will consider the views of ActewAGL Retail and others in determining its final decision on the pass-through of costs from the ACT Government's energy efficiency scheme. For the purposes of the draft determination, the Commission proposes to include a specific ACT energy efficiency scheme pass-through as discussed in chapter 4.

Feed-in tariff scheme with capacity greater than 30 kW

The Commission notes that the current price determination explicitly excludes changes to the ACT Government feed-in tariff scheme in relation to extension of the scheme to generators with capacity greater than 30 kW. The Commission made this decision on the basis that at that time expansion of the scheme was uncertain and that, irrespective, there were unlikely to be any significant costs incurred by ActewAGL Retail.

Since that time, the ACT Government has closed subscription to the existing less than 30 kW segment of the scheme. As such, the Commission does not consider it necessary to include a pass-through arrangement for extension of the scheme to generators with capacity greater than 30 kW.

Materiality threshold

ActewAGL Retail has argued for the removal of the current materiality threshold on the basis that all of the pass-through events are outside its control and that the administrative cost burden of applying to the Commission for recovery of a pass-through amount provides sufficient incentive for it not to seek pass-through unless costs are material.

The Commission has previously adopted a materiality threshold of 0.25% of regulated retail revenue. The reasoning behind adopting a materiality threshold is to reduce administrative and regulatory costs and guard against frivolous claims.

The Commission considers it appropriate to maintain the existing approach. The Commission believes this is an appropriate outcome given that the materiality threshold does not apply in the case of the mid-term review. As such, ActewAGL Retail will be able to provide a submission to the Commission on pass-through events that do not meet the materiality threshold as part of the mid-term review process.

The proposed approach is consistent with restricting pass-through claims to major events.

5.5 Draft decision

The proposed pass-through arrangements for the 2012–14 determination are detailed in chapter 6. They are based on the 2010–12 arrangements but include specific mention of an ACT energy efficiency scheme, continued exclusion of a feed-in tariff scheme for generators with capacity greater than 30 kW and maintenance of the current 0.25% of regulated revenue materiality threshold.

6 Draft price direction

This chapter sets out the Commission's draft price direction for the regulated retail price for the period from 1 July 2012 to 30 June 2014.

6.1 Period of the direction

The provisions below will apply to the period from 1 July 2012 to 30 June 2014.

6.2 Price control

ActewAGL Retail must ensure that its regulated retail tariffs for 2012–13 and 2013–14 comply with the following weighted average price cap formula:

$$\sum_{i=1}^{n}\sum_{j=1}^{m} P_{ij}^{t} Q_{ij}^{t-1} \leq \left(\sum_{i=1}^{n}\sum_{j=1}^{m} P_{ij}^{t-1} Q_{ij}^{t-1}\right)(1+X^{t})(1+CPI)$$

where

- ActewAGL Retail has *n* regulated retail tariffs that each have up to *m* components
- P_{ij}^{t} is the price that ActewAGL Retail proposes to charge for component *j* of regulated tariff *i* in year *t*
- Q_{ij}^{t-1} is the reference quantity for component *j* of the regulated tariff *i* defined as the actual quantity (in both customer numbers or megawatt hours) as reported by ActewAGL Retail for the 12-month period ending 31 March in year *t*–1
- P_{ij}^{t-1} is the price for component *j* of regulated tariff *i* for year *t*–1
- X^{t} is 0.1331 where year *t* is 2012–13 and is determined in accordance with clause 6.3 where year *t* is 2013–14
- *CPI* is 0.0339 where year *t* is 2012–13 and is calculated in the following manner where year *t* is 2013–14:

$$CPI = \frac{CPI_{March2012} + CPI_{June2012} + CPI_{Sept2012} + CPI_{Dec2012}}{CPI_{March2011} + CPI_{June2011} + CPI_{Sept2011} + CPI_{Dec2011}} - 1$$

6.3 The value of X^t in 2013–14

Subject to the provisions of section 6.4, X^t will be determined in the same manner as in chapter 3 of this report, with the components of X^t to be determined as set out in table 6.1.

Table 6.1 Methodology for determining X^t for 2013–14

Component	Method
Energy purchase cost ($/MWh)	As set out below
Energy contracting costs ($/MWh)	0.81 × (1+CPI)
Green costs ($/MWh)	2013–14 forecast green costs reflected as submitted by ActewAGL Retail and approved by the Commission
Energy losses (%)	Based on AEMO's estimates for 2013–14
NEM fees ($/MWh)	0.81 × (1+CPI)
Retail operating costs ($/MWh)	11.23 × (1+CPI)
Transmission and distribution network costs ($/MWh)	2013–14 forecast network costs reflected as submitted by ActewAGL Retail and approved by the Commission
Cost pass-through	Cost pass-through proposed by ActewAGL Retail and approved by the Commission
Retail margin (% of sales)	5.4%

6.4 Calculation of energy purchase costs in 2013–14

Notwithstanding the Commission undertaking a detailed review of the EPC component (and the ACT energy efficiency scheme) as discussed in chapter 4, the Commission will calculate EPC in the manner set out below:

$$\mathrm{EPC} = \mathrm{FP} \times (\mathrm{LS} + \mathrm{HC})$$

where FP is the forward price, LS is the load shape and HC is the hedging cost.

The forward price for 2013–14 is determined using the reported quarterly settlement prices during 2013–14 for New South Wales base load electricity reported on the d-cyphaTrade website. For each quarter, the forward price is the numerical average of the 2013–14 settlement price over the period 8 November 2011 through 31 May 2013 for the third and fourth quarters of 2013 and the period 1 July 2012 through 31 May 2013 for the first and second quarters of 2014.

The load shape is the average of ratio of the load-weighted spot price to the time-weighted spot price calculated on a quarterly basis over the years 2003–04 to the most recently completed quarter applied to the net system load profile for the ACT. The load ratio for 2013–14 will be calculated from the net system load profile for the ACT data available from AEMO.

The hedging cost is calculated by the following formula:

$$\mathrm{HC} = 0.5 \times \left(\mathrm{LR} + 0.1 - \mathrm{LS}\right)$$

where LR is the load ratio and HC and LS are defined above.

There are three parts to the calculation of the hedging cost: the load ratio, which is the maximum value of the observed ratio of the maximum load to the average load plus an adjustment to take account that the observed maximum may be less than the true maximum; the load shape; and the percentage mark-up of the forward price to the spot price (estimated at 5%).

6.5 Pass-throughs

Timing of pass-through applications

ActewAGL Retail may make application to the Commission for a pass-through:

- when the Commission is establishing the X^t factor for 2013–14
- at any time during either 2012–13 or 2013–14 (ActewAGL Retail may make a maximum of one application for a pass-through during each financial year).

If the Commission requires ActewAGL Retail to make a negative pass-through, it will occur during one of the pass-through events defined above.

Pass-through events

Regulatory change events and tax change events are pass-through events and may be the subject of a pass-through application by ActewAGL Retail or negative pass-through applied by the Commission.

Regulatory change event

A regulatory change event is a decision made on or after 8 June 2012 by any 'Authority' (any government or any minister, agency department, instrumentality or other authority of government and the Commission, the AEMC, the AER or AEMO) that has the extent of materially varying the nature, scope, standard or risk of providing services to regulated retail tariff customers, or the manner in which those services are provided. A regulatory change event includes obligations in respect of:

- any customer hardship program
- retailer of last resort events
- a green energy scheme, excluding the Australian Government's carbon pricing mechanism but including the RET scheme
- changes in distribution or transmission charges
- the ACT Government's energy efficiency scheme.

A regulatory change event does not include obligations in respect of:

- any decision, determination or ruling in relation to energy loss factors
- changes to the ACT Government's feed-in tariff scheme in relation to the extension of that scheme to generators with a capacity greater than 30 kW
- smart metering trials.

Tax change event

A tax change event means the imposition of a relevant tax, the removal of a relevant tax, or a change in the way a relevant tax is interpreted or calculated. A relevant tax is any tax, levy, impost, deduction, charge, rate, duty or withholding tax that is levied on ActewAGL Retail by any Authority (as defined above) and is payable by ActewAGL Retail, other than:

- income tax and capital gains tax
- stamp duty
- AEMO fees

- fees payable by ActewAGL Retail in respect of its retail licence
- penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax
- any tax that replaces or is equivalent or similar to any of the taxes referred to above (including any state-equivalent tax).

Materiality threshold

A pass-through will only be made where ActewAGL Retail incurs materially higher or lower costs in providing services to regulated retail tariff customers such that the aggregate impact of the pass-through event or events on costs is greater than 0.25% of ActewAGL Retail's revenue from regulated retail tariffs in the 12 months to March of the most recent year.

For the avoidance of doubt, any changes in the components set out in table 6.1 above that are applied in determining tariffs for 2013–14 do not need to meet the materiality threshold.

Calculation and application of pass-through amount

The Commission will calculate the amount of the pass-through amount, both for a within-year event and when establishing the P^t factor in respect of tariffs for 2013–14, having regard to the following principles:

- the implications for efficient costs of ActewAGL Retail's actions, including whether ActewAGL Retail has taken or omitted to take any action where such action or omission has increased the magnitude of the costs incurred
- the need to ensure that ActewAGL Retail does not recover costs to the extent that provisions have already been made or otherwise taken into account
- the need to ensure that ActewAGL Retail only recovers any actual or likely increment in efficient costs to the extent that such increment is solely as a consequence of a pass-through event
- in the case of a regulatory change event, any costs that ActewAGL Retail has incurred prior to, but in preparation for, the occurrence of that regulatory change event
- in the case of a tax change event, any change in the way another tax is calculated, or the removal or imposition of another tax which in the Commission's opinion is complementary to the tax change event concerned
- the need to ensure that, as a result of a pass-through event occurring and the indexation approach used to calculate X^t, the impact of the pass-through event is not over-recovered through being carried through in tariffs in subsequent periods. This may require the Commission to apply a negative pass-through factor (PT^t) when establishing tariffs for 2013–14 in the case where a negative pass-through event has occurred during the year.

In addition:

- Where a pass-through event is approved by the Commission during 2012–13 or 2013–14, the Commission may require ActewAGL Retail to implement the pass-through event at a particular date or in a particular manner.
- In considering any application by ActewAGL Retail in respect of a pass-through event, the Commission may consult with affected stakeholders to the extent the Commission considers appropriate.

- For the avoidance of doubt, the Commission will not have regard to the time value of money when establishing the amount of any pass-through.

For a pass-through event that occurs during 2012–13 or 2013–14, the Commission will add the annualised value of the pass-through event (either negative or positive) (APT^t) to the annual projected revenue target given in the weighted average price cap formula for that year and then require that the revised tariffs be constrained by the revised projected revenue target for the year. Thus:

$$\sum_{i=1}^{n}\sum_{j=1}^{m}\hat{P}_{ij}^{t}Q_{ij}^{t-1} \le (\sum_{i=1}^{n}\sum_{j=1}^{m}P_{ij}^{t}Q_{ij}^{t-1}) + APT \times (1+5.4\%)$$

where

- $\hat{P}_{ij}^{t}$ is the price that ActewAGL Retail proposes to charge for component *j* of regulated tariff *i* for the remainder of year *t*
- P_{ij}^{t} is the price that ActewAGL Retail currently charges for component *j* of regulated tariff *i*
- Q_{ij}^{t-1} is the reference quantity for component *j* of the regulated tariff *i* defined as the actual quantity (in both customer numbers or megawatt hours) as reported by ActewAGL Retail for the 12-month period ending 31 March in year *t*–1
- APT is the annualised pass-through amount, currently determined to be 5.4% of the value of sales.

If a pass-through event has occurred during 2012–13, for the purposes of determining X^t for 2013–14 as discussed in section 6.3 above, an additional component will be included in table 6.1 above, the additional component being the approved pass-through cost on an annualised basis for the year in question, such that if an approved pass-through event is included in retail prices during 2012–13, the annualised value of the pass-through (but not including an adjustment for the retail margin) will be included in the summation of costs for the purpose of determining X^t.

6.6 Price reset for 2013–14

The Commission requires ActewAGL Retail to submit on or before 10 May 2013 the following to the Commission:

- updated green costs for 2013–14
- full accounting of all proposed pass-throughs (including the ACT Government’s energy efficiency scheme) and
- calculation of the CPI.

ActewAGL Retail will submit to the Commission the updated networks costs as soon as these costs are approved by the Australian Energy Regulator.

The Commission will determine the energy purchase cost and the X factor for 2013–14 and report its determination to ActewAGL Retail by 7 June 2013.

Appendix 1 Terms of reference

Independent Competition and Regulatory Commission (Price Direction for the Supply of Electricity to Franchise Customers) Terms of Reference Determination 2011

Disallowable instrument DI2011–261

Made under the

***Independent Competition and Regulatory Commission Act 1997* (the Act), Section 15 (Nature of industry references) and Section 16 (Terms of industry references).**

Reference for investigation under Section 15

Pursuant to subsection 15(1) of the Act, I refer to the Independent Competition and Regulatory Commission (the 'Commission') the provision of a price direction for the supply of electricity to franchise customers for the period 1 July 2012 to 30 June 2014 with provision where appropriate for a review by 30 June 2013.

Terms of reference for investigation under section 16

Under the Act, section 16(1), I require that the Commission consider the following matters in relation to the conduct of the investigation:

1. The Commission should take into account the following matters:
    a. The impact on direct electricity costs of changes in government policies and pass through of those costs to regulated prices including, but not restricted to:
        i. the Commonwealth Government Carbon Tax;
        ii. Commonwealth or ACT retailer obligation energy efficiency schemes;
        iii. the Commonwealth Government's Large and Small Renewable Energy Targets;
        iv. the ACT Feed-in Tariff; and
        v. any other schemes implemented to address climate change.
    b. The efficient and prudent cost of managing risk in the cost of purchasing electricity.
    c. The requirements of s. 20 of the Act.
    d. Any other matters the Commission considers relevant.
2. The Commission must produce its final report in time sufficient to allow ActewAGL Retail to make any necessary changes to its billing system and to provide information on the new tariff to customers.

Andrew Barr MLA
Treasurer
21 September 2011

Appendix 2 Extracts from the ICRC Act

15 Nature of industry references

(1) A referring authority may provide an industry reference to the commission in relation to any of the following matters:

(a) prices for regulated services;

(b) competition within a regulated industry;

(c) any other matter in relation to a regulated industry;

(d) any matter in relation to regulated industries in general;

(e) any other matter in relation to an industry, or industries in general;

(f) any matter provided for by another law of the Territory.

(2) The fact that a price direction is in force in relation to a regulated industry does not preclude a further investigation of prices in the industry, or the making of a new price direction in relation to prices in the industry.

(3) An industry reference may limit the scope of the investigation and report to a particular aspect of the regulated industry, or to a particular period during which the industry has been operating, or in any other matter.

(4) An industry reference may relate to a number of goods or services supplied by the same or different suppliers.

(5) An industry reference may be withdrawn or amended by the referring authority at any time before the commission has delivered its report to the person.

(6) If an industry reference is amended or withdrawn, the referring authority must prepare a written notice setting out the reasons for the amendment or withdrawal.

(7) The referring authority must give a copy of the notice to the commission.

(8) The notice is a notifiable instrument.

Note A notifiable instrument must be notified under the Legislation Act.

16 Terms of industry references

(1) The referring authority may determine terms of reference for an investigation on an industry reference.

(2) The terms of reference may include 1 or more of the following:

(a) a specification of a period within which a report is required to be submitted to the referring authority;

(b) a requirement that the commission consider specified matters;

(c) except in relation to price regulation, the making of a price direction and any related investigation and report—a requirement that the commission exercise its functions subject to any subsequent written direction of the authority.

(3) A determination under subsection (1) is a disallowable instrument.

Note A disallowable instrument must be notified, and presented to the Legislative Assembly, under the Legislation Act.

(4) A referring authority must cause a direction mentioned in subsection (2) (c) to be presented to the Legislative Assembly within 6 sitting days after it is given.

20 Directions about prices

(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.

Appendix 3 Submissions on issues paper

In February 2012, the Commission released an issues paper setting out some of the key matters for consideration as part of this investigation. In response to the issues paper, the Commission received submissions from:

- ACT Civil and Administrative Tribunal (ACAT)
- AGL Energy Limited
- ActewAGL Retail
- TRUenergy
- Energy Supply Association of Australia (ESAA)
- Origin Energy
- ACT Health Directorate.

The submissions, which are available on the Commission's website, are summarised below.

ACT Civil and Administrative Tribunal

ACAT supported the regulatory approach outlined in the issues paper. ACAT advocated that the Commission's methodology should not be changed, including retail operating costs modelled after the incumbent retailer, unless compelling evidence is presented.

The submission noted ACAT's opposition to previous increases in the retail margin. ACAT recommended returning to a 5% margin, while benchmarking profitability against other Australian retail electricity providers.

Due to the uncertainty in electricity purchase costs arising from the imposition of a price on carbon, ACAT proposed the possibility of setting retail prices for 2012–13 with a full review for 2013–14.

AGL Energy Limited

AGL's submission focused largely on energy purchase costs. AGL highlighted its disagreement with the current approach, suggesting that it is unrepresentative of the costs and risks faced by a retailer servicing a small customer load in the ACT. Instead, the regulated retail price should be based on the long-run marginal cost (LRMC) of generation needed to supply a retailer's customer load. AGL further criticised the Commission's market-based approached to valuing green costs. It suggested using an LRMC approach or, as an inferior option, sampling large-scale generation certificate prices. Nevertheless, AGL conceded that the Commission may continue to apply its market-based methodologies.

AGL noted that Australian Government legislation on the price of carbon has impacted both the price and liquidity of forward electricity contract trading. AGL submitted that it is not possible to accurately disentangle carbon pricing impacts from other events and that the use of carbon-inclusive futures price data will result in underestimation of a retailer's costs associated with the carbon pricing mechanism. To mitigate these effects, AGL suggested adopting a carbon-exclusive forward contract price plus an allowance for carbon costs in the Commission's energy purchase cost (EPC) methodology.

AGL suggested that the Commission's regulatory approach be based on a new-entrant retailer rather than an incumbent. AGL noted that the relevant benchmark is supported by the Australian Energy Market Commission's (AEMC's) review of competition in the ACT electricity retail market.[48] Moreover, AGL stated that the new-entrant retailer approach is preferred in other jurisdictions around Australia and more accurately represents the costs associated with the operation of non-incumbent retailers in the ACT. As part of such a change in approach, AGL advised that the Commission should specifically account for CARC and consider a retail margin in the context of the overall approach to price setting. AGL asserted that it is not appropriate to make such inter-jurisdictional comparisons.

ActewAGL Retail

ActewAGL Retail addressed the Commission's regulatory approach, methodology and efficient cost components in their submission.

The Commission's regulatory approach, in particular its stance on setting prices according to the incumbent retailer, was criticised. ActewAGL Retail asserted that the Commission's task is 'to set a market based price in an open market environment'.[49] Previous price directions have set an efficient cost allowance that has not been reflective of market costs. Hence, efficient costs should be based on a new-entrant retailer instead of the incumbent. ActewAGL Retail cited the AEMC's 2011 review of the effectiveness of competition in the ACT retail electricity market as evidence for its assertion.

With regard to the Commission's methodology, ActewAGL Retail supported most of the arrangements established in previous regulated retail price determinations. In particular, ActewAGL Retail noted its backing for:

- the existing pass-through triggers, including both main categories: regulatory change events and tax change events
- the existing mid-term review process, scheduled to occur in June 2013 for this determination.

ActewAGL Retail argued that the administrative burden of approaching the Commission for cost recovery is a sufficient deterrence from seeking a pass-through for low-impact events and a materiality threshold for cost pass-throughs is not required. Furthermore, as pass-through events are associated with circumstances beyond ActewAGL's control, it emphasised the injustice of ActewAGL Retail bearing the respective risks and their resultant costs.

The remainder of the submission addressed the efficient cost components and their related issues. For EPC, ActewAGL Retail submitted its preference for the adoption of the LRMC of generation, but in the event that the Commission retains its 2010–12 methodology, it outlined two issues with the EPC calculation. First, ActewAGL Retail suggested problems with applying Sydney Futures Exchange (SFE) data in the EPC methodology, including:

- at all times prior to December 2011, the impact of a price on carbon is substantially less than a retailer's actual cost for carbon
- the value of carbon in SFE prices is not measureable with any degree of certainty.

This implies that over a 23-month averaging period, a prudent retailer would not fully recover its actual energy purchase costs.

[48] AEMC 2011.
[49] ActewAGL Retail 2012, p. 7.

Second, ActewAGL Retail identified delayed trading in the wholesale electricity market. To address this reduced liquidity in the market, the SFE data is no longer robust over a 23-month period. In the issues paper, the Commission suggested shortening the forward price averaging period. ActewAGL retail submitted concerns with this approach, namely that it:

- disregards the fact that retailers were hedging their load through over-the-counter carbon-exclusive contracts before and during the 23-month averaging period
- weakens the claim that SFE data is a good proxy for prices at which retailers were able to hedge their loads for the 2012–13 financial year.

To resolve the impact of the price on carbon on the EPC methodology, ActewAGL Retail suggested the following procedure:

- Substitute the SFE forward price curve with either the ICAP or Australian Financial Markets Association carbon-exclusive curves.
- Increase the forward price averaging period to between two and three years, or as long as the data is available.
- Include a separate allowance for carbon, based on Australian Financial Markets Association Australian Carbon Benchmark addendum.

For green costs, ActewAGL Retail proposed that consistency with previous price determinations be maintained, by which they mean that all green costs incurred by a retailer over the 2012–14 period should be passed through. Three compliance schemes were identified in the submission—the RET; the ACT energy efficiency scheme; and the ACT feed-in tariff. The latter was dismissed as it is recovered in distribution charges.

ActewAGL Retail proposed to retain the pass-through mechanism for the LRET and the SRES components of the RET to account for discrepancies between estimates of the renewable power percentage for the LRET and the small-scale technology percentage for the SRES. It did, however, suggest an alternative model to establish prices for large-scale generation certificates. It urged the Commission to consider the use of LRMC of large-scale renewable generation based on the proposition that it more closely approximates power purchasing agreement prices. Nevertheless, in the event the Commission continued to be predisposed towards a market-based approach, ActewAGL suggested the following considerations:

- the use of publicly available traded large-scale renewable generation prices
- the inclusion of retailer holding costs of approximately 10%
- the inclusion of appropriate allowances to account for volume risk, liquidity risk, delivery risk and regulatory risk, amounting to approximately 7.5%.

The ACT Government intends to implement an energy efficiency scheme during the 2012–14 period, and ActewAGL Retail acknowledged that it will incur compliance costs. As little is publicly known about the structure of the scheme, ActewAGL Retail proposed that it be passed through as a green cost in the next price direction period.

ActewAGL Retail also expressed reservations about both the CARC and retail margin components of the efficient costs methodology. ActewAGL Retail argued for the inclusion of CARC in the Commission's building block methodology, as it believes that CARC represents a legitimate cost borne by retailers active in the ACT electricity market. Due to full retail contestability, retailers must make efforts to acquire new customers and retain current ones. ActewAGL Retail noted and remains opposed to the Commission's previous position of forgoing CARC inclusion due to its regulatory approach of basing efficient costs on the incumbent.

ActewAGL asserted that a 'retail margin should be commensurate with risks associated with providing retail energy services and should reflect systematic risk faced by retailers'.[50] As the Commission adopted IPART's retail margin of 5.4%, but grants lower EPC than that of IPART's LRMC methodology, ActewAGL argued that its systematic risks are being undervalued. Hence, it encouraged the Commission to adopt a market-based retail margin of around 6%.

For the remaining cost components, ActewAGL Retail supported a methodology consistent with the 2010–12 regulated retail price direction.

TRUenergy

TRUenergy questioned the Commission's lack of focus on competition but noted that it was not a specific requirement of the terms of reference. TRUenergy stated that it believed that the ACT committed to further competition when it signed on to the updated Australian Energy Market Agreement. To improve competition in the ACT, TRUenergy submitted that the Commission should base its efficient costs methodology on a hypothetical new-entrant retailer. In particular, it recommended allocating CARC as a means to encourage other retailers to enter the ACT market.

Energy Supply Association of Australia

ESAA noted the ACT Government's decision to not act on the AEMC's advice to remove the regulated retail price. ESAA highlighted the asymmetric risks associated with price setting in a retail electricity market and contended that setting prices above the cost of supply will result in competition eroding margins back to efficient levels. However, setting prices below the cost of supply impedes efficient market operation, forces participants to absorb costs and refrain from investment and removes incentives for new entrants.

To avoid the risks associated with the under-recovery of underlying costs, ESAA made a number of recommendations regarding the Commission's methodology:

- It should be flexible to allow for any significant change in costs to be reflected in the regulated retail price.
- It should be based on the efficient costs of a new-entrant retailer, including appropriate level of CARC.
- It should include a retail margin commensurate with risks faced by retail businesses.
- It should contain a mechanism allowing the cost of carbon to be passed through efficiently and promptly.

Origin Energy

Origin underlined its support for a 'regulatory approach that is the most consistent with the development of retail contestability'.[51] Origin took issue with the Commission's choice to base efficient costs on the incumbent retailer. Origin cited the AEMC's review of the effectiveness of competition and its recommendation that increased competition could be stimulated by basing the regulated retail tariff on the efficient costs of a hypothetical new-entrant retailer.

[50] ActewAGL Retail 2012, p. 21.7

[51] Origin Energy 2012, p. 2.

Principally, Origin proposed the inclusion of CARC in the efficient cost methodology. Origin argued that:

> the Commission's stance [is] based on an erroneous view that an incumbent firm and new entrants face the same set of cost drivers except for the cost of attracting customers. This observation may be true in an immature market in which the incumbent firm does not need to actively compete. However, as competition increases the incumbent must ramp up its acquisition and retention budget otherwise it risks losing a substantial share of the market ... In circumstances where the incumbent is not exhibiting these behaviours it indicates new entrant behaviour is constrained.[52]

Origin addressed a number of the other cost components in the efficient costs methodology. In relation to the EPC model, Origin expressed concern that it:

- implies that a retailer hedges to the average load weighted price whereas a prudent retailer hedges to more extreme price outcomes
- assumes that retailers hedge their entire load at the forward flat price adjusted for the historical load weighted price
- takes no account of caps to cover high pool prices at times of peak demand
- undervalues or ignores energy trading risks.

Origin advocated using the LRMC of generation to set the regulated retail price floor, especially where there are market uncertainties and political risk, and the inclusion of a risk allowance to cover the cost of products to hedge against volume and extreme event risks.

Origin also noted that the EPC included a price on carbon as an input cost and that the broad expectation of the market was that the $23 per tonne CO_2 price would be passed through at the market carbon intensity.

With regard to green costs, Origin affirmed that the actual costs of the incumbent and those for a new entrant should be identical. Irrespective of the methodology adopted, Origin stressed the importance of transparency in green cost disclosure and calculation to permit greater stakeholder scrutiny. In addition, it mentioned the under-recovery of SRES costs incurred in 2011–12 and advised that they should be passed-through in the 2012–13 regulated retail price.

Origin suggested that the retail margin should be escalated to account for greater wholesale risk in the ACT market, unless an appropriate risk premium is added to the energy cost allowance.

It supported the current cost pass-through mechanism which allows for unanticipated cost changes that meet the materiality threshold. In addition, if an effective cost pass-through arrangement were to be excluded, Origin suggested that there should be an escalated retail margin to account for the added risk assumed by the retailers.

ACT Health Directorate

The ACT Health Directorate noted the substantial impact of the Australian Government's legislation regarding a price on carbon. The Directorate stated that it was aware of the impact on the retail price of electricity to non-contestable customers, yet maintained that the methodology used by the Commission is robust and should not be substantially changed.

The Directorate also noted that it will be pursuing, through the Health Infrastructure Program, available energy options to reduce its carbon footprint and exposure to movements in future retail prices.

[52] Ibid.

Abbreviations and acronyms

ABS	Australian Bureau of Statistics
ACAT	ACT Civil and Administrative Tribunal
ACB	Australian Carbon Benchmark
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AFMA	Australian Financial Markets Association
CAC	customer acquisition costs
CARC	customer acquisition and retention costs
CO_2-e	carbon dioxide equivalent
Commission	Independent Competition and Regulatory Commission
CPI	consumer price index
EBITDA	earnings before interest, taxes, depreciation and amortisation
EPC	energy purchase cost
ESAA	Energy Supply Association of Australia
FP	forward price
HC	hedging costs
ICRC	Independent Competition and Regulatory Commission
ICRC Act	*Independent Competition and Regulatory Commission Act 1997* (ACT)
IPART	Independent Pricing and Regulatory Tribunal of New South Wales
kW	kilowatt
LGC	large-scale generation certificate
LR	load ratio
LRET	Large-scale Renewable Energy Target
LRMC	long-run marginal cost
LS	load shape
MWh	megawatt hour
NEM	National Electricity Market

OTC	over the counter
ORER	Office of the Renewable Energy Regulator
QCA	Queensland Competition Authority
RET	Renewable Energy Target
RPP	Renewable Power Percentage
SFE	Sydney Futures Exchange
SFG	Strategic Finance Group
SRES	Small-scale Renewable Energy Scheme
STC	small-scale technology certificate
STP	Small-scale Technology Percentage

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