



FINAL REPORT

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Australian Energy Market Commission

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Impact of Prices and Profit Margins on Energy Retail Competition in Victoria

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
APPROACH	1
ESTIMATED MARGINS AND MARGIN TRENDS.....	2
COMPETITIVE TRENDS IN VICTORIA.....	4
1. INTRODUCTION.....	5
1.1. TERMS OF REFERENCE	5
1.2. STRUCTURE OF THIS REPORT.....	5
2. THE VICTORIAN ENERGY RETAILING MARKET	7
2.1. MARKET CONTRACTS AND STANDING OFFER CONTRACTS.....	7
2.2. RETAIL PRICE PATHS FOR PRESCRIBED CUSTOMERS.....	8
2.3. ACTIVE ELECTRICITY AND GAS RETAILERS IN VICTORIA	8
2.4. PROPORTIONS OF CUSTOMERS ON MARKET CONTRACTS	10
3. INPUT DATA AND INFORMATION USED IN THIS REPORT	11
3.1. DATA REQUESTS TO RETAILERS	11
3.2. PUBLIC DOMAIN INFORMATION.....	12
4. RETAIL COSTS	13
4.1. METHODOLOGY FOR ANALYSIS OF RETAIL COSTS	13
4.1.1. Costs of standing offers.....	13
4.1.2. Ex ante versus ex post estimates of margins.....	14
4.1.3. Local retailer compliance costs	14
4.1.4. Customer acquisition costs	14
4.1.5. Retail business acquisition costs.....	15
4.2. WHOLESALE ENERGY COSTS.....	16
4.2.1. Electricity wholesale energy costs.....	17
4.2.2. Gas wholesale energy costs	25
4.3. NETWORK CHARGES.....	28
4.3.1. Electricity network charges.....	29
4.3.2. Gas network charges	30
4.4. RETAILER OPERATING COSTS.....	31
4.4.1. Categories of retailer operating costs.....	32
4.4.2. Electricity retailer operating costs.....	33

4.4.3. Gas retailer operating costs	39
5. RETAIL OFFERS AND REVENUE	41
5.1. STANDING OFFERS	41
5.2. MARKET OFFERS	42
5.2.1. Types of market offers.....	43
5.2.2. Approach for estimating revenues from market contracts	44
5.3. DUAL FUEL OFFERS	45
6. RETAIL MARGINS.....	46
6.1. TERMINOLOGY	46
6.2. NET MARGINS ON ELECTRICITY SALES.....	47
6.2.1. Comparison with other margin estimates	47
6.2.2. Net margins as \$ values.....	48
6.2.3. Sensitivity of margin estimates to higher retailer operating costs	49
6.3. NET MARGINS ON GAS SALES	49
6.3.1. Net margins as \$ values.....	50
6.3.2. Sensitivity of margin estimates to higher retailer operating costs	50
6.4. SENSITIVITY OF MARGIN ESTIMATES TO THE INCLUSION OF BUSINESS ACQUISITION COSTS	51
6.5. NET MARGINS DERIVED FROM OTHER SOURCES	52
APPENDIX A : DETAILS OF THE PRICE PATH.....	54
A.1 BASIC OPERATION.....	54
A.2 THE DECEMBER 2003 ELECTRICITY AND GAS PRICE PATH DETERMINATIONS	54
A.3 REVISED (2006) RETAIL ELECTRICITY PRICE PATH	56
APPENDIX B : SURVEY OF MARKET OFFERS – AUGUST 2007	58
B.1 CURRENT MARKET OFFERS	58
B.2 HISTORICAL MARKET OFFERS.....	66
APPENDIX C : SURVEY OF RETAILER TERMINATION FEES (2007)	68
APPENDIX D : GREEN ENERGY	70
D.1 WHAT IS GREEN ENERGY	70
D.2 RANGE OF GREEN OFFERS.....	72
D.3 COSTS TO CONSUMERS OF GREEN ENERGY OFFERS.....	75
D.4 COSTS TO RETAILERS OF GREEN OFFERS	76

APPENDIX E : ESTIMATED ELECTRICITY NET MARGINS BY YEAR AND DISTRIBUTION NETWORK AREA.....	77
---	----

APPENDIX F : ESTIMATED GAS NET MARGINS BY YEAR AND RETAIL AREA	79
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TABLE OF FIGURES

Figure 1: Swap contract volume allocation.....	19
--	----

Figure 2: Cap contract volumes.....	19
-------------------------------------	----

TABLE OF TABLES

Table 1: Electricity net margins for standing offers and market contracts, and the market as a whole, under varying wholesale energy cost conditions	2
--	---

Table 2: Gas net margins for standing and market offers, and the market as a whole.....	3
---	---

Table 3: Victorian electricity retailers' market shares at 30 June 2006	9
---	---

Table 4: Victorian gas retailers' market shares at 30 June 2006	10
---	----

Table 5: Possible range of electricity wholesale energy purchase costs 2004-2007 (\$/MWh) as estimated in December 2003 to support standing offer price path.....	21
---	----

Table 6: Average monthly prices for swap contracts for the Victorian node (\$/MWh)	22
--	----

Table 7: Estimates of electricity wholesale electricity purchase costs for large portfolio retailers 2004-2007 (\$/MWh).....	23
--	----

Table 8: Weighted average Victorian gas spot market prices	26
--	----

Table 9: Assumed delivered costs of gas (including charges, fees, and UAFG) 2004-2007 (\$/GJ)	28
---	----

Table 10: Estimates of average electricity network charges incurred by Victorian retailers for supply to prescribed customers 2004-2007 (\$/MWh).....	29
---	----

Table 11: Estimates of average gas network charges incurred by Victorian retailers for supply to prescribed customers 2004-2007 (\$/GJ)	31
---	----

Table 12: Summary of most recent decisions on retailer operating costs for Australian electricity retailers	33
---	----

Table 13: Electricity customer acquisition costs (\$/customer/yr) as derived from retailer submissions to the Commission	39
--	----

Table 14: Gas customer acquisition costs (\$/customer/yr) as derived from retailer submissions to the Commission	40
--	----

Table 15: Estimates of average electricity standing offer prices by distribution area (2003-2007)	41
---	----

8 November 2007

Table 16: Estimates of average gas standing offer prices by retailer (2003-2007).....	42
Table 17: Electricity net margins for standing offers and market contracts, and the market as a whole, under varying wholesale energy cost conditions	47
Table 18: Summary of most recent decisions on net margin for Australian electricity retailers.....	48
Table 19: Electricity net margins (\$/customer) for standing offers and market contracts, under varying wholesale energy cost conditions, for various customer usage levels	48
Table 20: Sensitivity analysis of net margins for electricity standing offers and market contracts, under varying wholesale energy cost conditions – based on retailer operating costs of \$96/customer	49
Table 21: Gas net margins for standing offers and market contracts, and the market as a whole	49
Table 22: Gas net margins (\$/customer) for standing offers and market contracts, for various customer usage levels.....	50
Table 23: Sensitivity analysis of net margins for gas standing offers and market contracts – based on retailer operating costs of \$96/customer	50
Table 24: Net margins – based on reducing the margin of an average standing offer customer by \$74.50 per year.....	52
Table 25: EBITDA on energy retailing operations as reported by AGL Energy and Origin Energy	53
Table 26: Retail price path for electricity (2004-2007).....	54
Table 27: Retail price path for gas (2004-2007).....	55
Table 28: Revised retail price path for electricity for 2006 and 2007	56
Table 29: Revised retail price path for electricity for 2006 and 2007 by distribution area.....	57
Table 30: Electricity and gas market offers for prescribed customers – as at August 2007	59
Table 31: Early termination fees.....	68
Table 32: Green energy offers.....	72
Table 33: Range of costs to consumers of GreenPower accredited electricity.....	75
Table 34: Estimated electricity standing offer net margins by year and distribution network area	78
Table 35: Estimated electricity market contract net margins by year and distribution network area	78
Table 36: Estimated gas standing offer net margins by year and retail area	79
Table 37: Estimated gas market contract net margins by year and retail area	79

EXECUTIVE SUMMARY

The Australian Energy Market Commission (the Commission) engaged CRA International Pty Ltd (CRA) to provide independent advice on the margins earned by Victorian retailers of electricity and gas to small customers in recent years and the implications of those margins for the effectiveness of competition in Victoria.

APPROACH

For the purposes of this study we have estimated net retail margins as commonly defined in a regulatory context.

The net margin of an energy retailer is the difference between its retail revenues and a measure of its costs, which are comprised of energy purchase costs, transmission and distribution charges, fees and levies, and operating costs. The net margin is usually calculated as a percentage of total revenue, and this approach has also been used in this study.

The margin estimates in this report are presented in the form of broad ranges. This is a reflection of the fact that little actual data was available from Victorian retailers to undertake an analysis of historical energy retail margins. We have therefore relied on information that is in the public domain, to assess the revenue and cost components that determine retailer margins.

In particular, and in the absence of actual data, we have revisited the analysis that was undertaken to calculate a (regulated) price path for the Victorian electricity and gas retailers in 2003 for the years 2004-2007, and have substituted our best estimates of cost outturns for those years. Our approach to estimating the different cost items was as follows:

- *Energy purchasing costs:* For electricity, these costs have been estimated using historical published contract prices for a fully contracted retailer. In the case of gas, we have estimated that energy purchase costs have increased by CPI+2 percentage points each year over the last four years.
- *Network charges:* For both electricity and gas, we have estimated transmission and distribution charges on the basis of the published regulated network charges.
- *Fees and levies:* These arise in both electricity and gas and have also been estimated from public sources.

8 November 2007

- *Retailer operating costs:* These are the costs that an energy retailer incurs in the course of carrying out its business and include a wide range of items, including billing, call centre, credit management, trading, and IT costs, as well as corporate overheads. Our estimate of these costs is the same for gas as for electricity, and is based on an assessment of recent regulatory decisions and other information in the public domain.
- *Acquisition costs:* Additionally, our estimates of retailer operating costs include a component for “acquisition costs”, the costs of ongoing marketing activities to maintain existing customer numbers or attract new numbers.

To derive revenue estimates for the Victorian electricity and gas retailers, we have estimated, as a starting point, retailers’ revenues from customers on standing offer contracts. This estimate was derived using the standing offers and an average consumption volume. For the revenue associated with market contracts, we relied on the results of a survey we conducted in August 2007 of the market offers listed on retailers’ websites, and some input provided by retailers describing their market offers that were available at that time. The results of that survey suggested that these market offers are usually priced at a discount to standing offers, and we have assumed a typical discount of 5 per cent in the case of electricity, and 3 per cent in the case of gas.

ESTIMATED MARGINS AND MARGIN TRENDS

Based on the approach and information sources described above, net margins for electricity standing and market offers were determined to be as shown in Table 1. The ranges reported below reflect differing assumptions about retailers’ wholesale contracting costs.

Table 1: Electricity net margins for standing offers and market contracts, and the market as a whole, under varying wholesale energy cost conditions

Contract type	Range of net margin		
	Low wholesale costs	Medium wholesale costs	High wholesale costs
Standing offer	11% to 22%	7% to 18%	3% to 14%
Market contract	1% to 13%	-3% to 9%	-8% to 4%
In the market as a whole (based on 60% of customers being on market contracts)	5% to 17%	1% to 13%	-4% to 8%

Source: CRA analysis

Notes: The margins in this Table are based on annual operating costs of \$75 per customer. If the annual operating costs were \$96 per customer, this would reduce each net margin by about 2 percentage points.

8 November 2007

If the margin on an average standing offer customer were to be reduced by \$74.50 per year (as a possible means of assigning business acquisition costs), this would reduce each standing offer net margin by about 7 percentage points, and would reduce each margin for the market as a whole by 3 to 4 percentage points.

Based on the data available and the analyses undertaken, we consider the following observations to be valid:

- While the margins available under the electricity standing offer tariffs vary across the years and the five Victorian electricity distribution areas, indicative margins available between 2004 and 2007 appear to have been between 7% and 18%;
- By contrast, the equivalent indicative margins under electricity market contracts, which typically include a 5% discount to the standing offer price, appear to range from -3% to 9%; and
- After weighting these results for the number of customers on electricity standing offers and market contracts, indicative net margins for the market as a whole appear to range from 1% to 13% across the various distribution areas between 2004 and 2007.

However, the quality of the data and the fact that retailers that adopted a less conservative hedging strategy than assumed in the study may have experienced higher wholesale electricity purchase costs suggests that actual results are more likely to be nearer to the midpoint or at the lower end of the ranges quoted above. This would also be consistent with the EBITDAs reported by Origin Energy and AGL in their annual reports of the past several years.¹

Table 2 below presents information on the net margins for gas standing offers and market contracts.

Table 2: Gas net margins for standing and market offers, and the market as a whole

Contract type	Range of net margin
Standing offer	2% to 5%
Market contract	-4% to -1%
In the market as a whole (based on 50% of customers being on market contracts)	-1% to 2%

Source: CRA analysis

Notes: The margins in this Table are based on annual operating costs of \$75 per customer. If the annual operating costs were \$96 per customer, this would reduce each net margin by about 3 percentage points.

¹ It should be noted that the EBITDA differs from the net margin used in this study. Given that EBITDA excludes capital cost items, it is likely to be higher than the corresponding net margin, which includes at least some of these costs.

8 November 2007

The estimated ranges for the net margins in Table 2 are narrower than is the case for electricity, reflecting the following two factors:

- Wholesale gas prices have been assumed to increase over the period at the same rate as was envisaged in the price path analysis undertaken in 2003, whereas the wholesale electricity prices are estimated to have changed substantially. This has caused more variation in estimated electricity costs (and hence margins) from year to year than is the case with gas; and
- Over the period of the analysis, there has been more variation in electricity network prices (due to incentive schemes and a price reset) than was the case for gas. This has caused more variation in estimated electricity costs (and hence margins) between the different distribution areas than is the case for gas.

COMPETITIVE TRENDS IN VICTORIA

Given data limitations, the estimates of ranges for electricity and gas retailer margins reported above are necessarily relatively broad.

However, there are other indicators that would suggest that there is significant competitive activity in the retail market for electricity and gas for small-volume users in Victoria:

- The Victorian retail electricity and gas markets have experienced significant levels of new entry;
- There is virtually universal access to market offers that provide discounts to the standing offers across all the electricity networks and the major gas networks; and
- Over 50% of mass market customers have switched to a market contract.

1. INTRODUCTION

The Australian Energy Market Commission (the Commission) is required under the Australian Energy Market Agreement (AEMA) to review and publicly report on the effectiveness of retail competition in jurisdictions participating in the National Electricity Market (the NEM), referred to as “retail competition reviews”.

The objective of the retail competition reviews is to assess the effectiveness of competition in the electricity and gas retail markets for the purpose of retaining, removing or reintroducing retail energy price controls. The assessment is required to be conducted on the basis of criteria developed by the Ministerial Council on Energy (MCE).

1.1. TERMS OF REFERENCE

The objective of this study undertaken by CRA is to provide the Commission with data analysis and a report in relation to prices charged and margins earned by Victorian retailers of electricity and gas to small customers in recent years, and the implications of those margins for the effectiveness of competition in Victoria. This study is one of several studies being prepared for and by the Commission in its conduct of the Victorian retail competition review. It is important to read this report alongside the other study findings. Analysis of retail prices and margins is only one aspect of a wide range of considerations that should be taken into account in a retail competition review, and it would not be appropriate to draw conclusions regarding the effectiveness of competition from this study in isolation from those other considerations.

1.2. STRUCTURE OF THIS REPORT

This study has been structured as follows:

- Section 2 briefly describes the Victorian retail market to provide the relevant context to the analysis;
- Section 3 describes data limitations that we encountered and the information sources that were used in this report;
- Section 4 explains the derivation of retailers’ costs;
- Section 5 explains the derivation of retailers’ revenues; and
- Section 6 explains the calculation of retailers’ margins.

Supporting analysis is contained in the appendices to this report:

- Appendix A provides details of the price paths that have set the standing offer prices for electricity and gas for 2004 through 2007;

8 November 2007

- Appendix B summarises the survey we have undertaken of website market offers that were available in the second half of 2007 from Victorian retailers;
- Appendix C summarises the results of a survey on termination fees charged by Victorian retailers;
- Appendix D describes retailers' "green energy" offers; and
- Appendix E and Appendix F provide more fine-grained estimates of retailer margin by year and area for the supply of electricity and gas respectively.

2. THE VICTORIAN ENERGY RETAILING MARKET

This section describes those aspects of the Victorian energy retailing market that are relevant for this study. We first briefly review the role of the “local retailer” for electricity and gas, and the corresponding distinction between market and standing offer contracts, and then provide an overview of active electricity and gas retailers in Victoria.

2.1. MARKET CONTRACTS AND STANDING OFFER CONTRACTS

During the 1990s, the Victorian Government implemented a process of corporatisation and privatisation of government-owned electricity and gas industry assets and businesses. Full retail competition (FRC) for electricity was subsequently introduced on 13 January 2002, while FRC for gas was introduced on 1 October 2002.

It is a feature of the design of the industry that there remains a “local retailer” in respect of every electricity and gas customer in Victoria. For each energy source, and in each geographic area, this retailer corresponds to the retailer that used to be the franchise monopoly retailer for that energy source in that geographic area:

- For electricity, AGL is the local retailer in two of the five geographic areas, Origin Energy is the local retailer in a further two areas, and TRUenergy is the local retailer in the remaining one area; and
- In the Victorian gas industry, AGL, Origin Energy and TRUenergy are the local retailers in one area each.

Under FRC, all electricity and gas customers can receive energy supplies by entering into a market contract based on a “market offer” from a retailer. However, no retailer is obligated to offer a market contract to any given customer. Customers that do not elect to take a market contract are supplied by their local retailer on the basis of a “standing offer” contract with defined terms and conditions.²

The Victorian Government has retained a reserve power to regulate retail prices for residential and small business customers on standing offer contracts. These are defined as customers that consume up to 160 MWh per annum in the case of electricity, and up to 5 TJ per annum in the case of gas. These customers are known as prescribed customers. As set out in Section 5, we have relied on public information about standing offers to impute retailers’ revenues from market contracts.

Customers with larger usage – above the levels that would categorise them as prescribed customers – are only able to receive electricity or gas supply by entering into a market contract. There are no standard or default prices for these larger usage customers that are regulated to apply in the absence of a market contract.

² In some circumstances, the contract is a deemed contract. This report does not make a distinction between standing offer contracts and deemed contracts.

8 November 2007

2.2. RETAIL PRICE PATHS FOR PRESCRIBED CUSTOMERS

Against the background of the reserve power, the Government negotiated a retail price path with the local electricity and gas retailers, which applies for a four-year period from 1 January 2004 to 31 December 2007.³

The rationale for the four-year price path was that it would provide some certainty in the market for investors, local retailers, new entrant retailers, and customers. The price path was to sit alongside a competitive market. Unlike the price-setting of monopoly service providers, the aim was not to provide customers with service at least cost, rather it was intended as a “safety net” on a transitional basis to protect customers that did not move to a market contract, while also encouraging developments in the competitive market.

Further detail regarding the price path is presented in Appendix A.

2.3. ACTIVE ELECTRICITY AND GAS RETAILERS IN VICTORIA

Since the industry has been restructured, there has been significant new entry into electricity retailing to small customers in Victoria, and to a lesser extent into gas retailing. Thirteen retailers offer electricity to small business customers and all but one of these also offers electricity to small business customers. Six of these retailers also offer gas to both residential and small business customers:⁴

- The three local retailers – AGL, Origin Energy and TRUenergy – offer both market contracts and standing offer contracts in both electricity and gas supply across Victoria;
- The following new entrant retailers currently offer electricity and gas market contracts: Australian Power & Gas, Country Energy, Simply Energy (previously the EA-IPR Retail Partnership trading as EnergyAustralia),⁵ and Victoria Electricity; and

³ Prior to the price path being put in place, the ESC had undertaken a one-year review of electricity prices (with some input from CRA) which set prices for 2002, and the Victorian Government had undertaken a one-year review (advised by CRA) which set electricity and gas prices for 2003.

⁴ In June 2007, EnergyOne exited from Australian electricity retailing, and a retailer of last resort was appointed to take over the supply of electricity to former EnergyOne customers (see www.energyone.com.au). In July 2007, Momentum Energy sold its customer base of 15,000 residential customers to Australian Power & Gas. Momentum Energy retained its small business customers and is still active in that market. See www.momentumenergy.com.au/about-us/newsarchive.aspx?id=1358.

⁵ On 25 May 2007, EnergyAustralia and International Power issued media releases stating that International Power would exercise an option to take full control and ownership of the EA-IPR partnership. This transition was completed in August 2007.

8 November 2007

- As at August 2007, the following new entrant retailers offered only electricity market contracts: Click Energy, Jackgreen, Momentum Energy, Our Neighbourhood Energy, Powerdirect (now part of AGL), and Red Energy.

There are no retailers that offer gas market contracts but not electricity market contracts. Several other retailers that have retail electricity and/or gas licences are not currently active in the Victorian energy market, or only serve larger usage industrial customers.

Table 3 and Table 4 provide an overview of the most recent published market share data for electricity and gas retailers, respectively.

Table 3: Victorian electricity retailers' market shares at 30 June 2006

Retailer	Number of residential and business customers	Percentage of total
AGL	718,235	31%
Origin Energy	766,312	33%
TRUenergy	560,546	24%
Others, of which:	308,308	13%
Country Energy	65,200	3%
EnergyAustralia	97,534	4%
Powerdirect	30,654	1%
Victoria Electricity	46,176	2%
Red Energy	44,955	2%
Momentum	2,554	0%
Jackgreen	496	0%
Total	2,353,401	100%

Source: *Energy Retail Businesses Comparative Performance Report for the 2005-06 Financial Year*, ESC Victoria, November 2006 (Table 1, Tables 33-34).

Note: Figures for retail customers of "other" retailers have been combined from different sources and represent an estimate.

8 November 2007

Table 4: Victorian gas retailers' market shares at 30 June 2006

Retailer	Number of residential and business customers	Percentage of total
AGL	516,796	32%
Origin Energy	561,644	34%
TRU	448,628	28%
Others, of which:	103,791	6%
EnergyAustralia	85,385	5%
Victoria Electricity	18,421	1%
Total	1,630,859	100%

Source: Energy Retail Businesses Comparative Performance Report for the 2005-06 Financial Year, ESC Victoria, November 2006 (Table 2, Tables 36-37).

Note: Figures for retail customers of "other" retailers have been combined from different sources, and represent an estimate.

2.4. PROPORTIONS OF CUSTOMERS ON MARKET CONTRACTS

The Commission recently reported that, based on data provided by retailers, as at 31 December 2006:

- 62% of residential and 43% of small business customers had switched to an electricity market contract (averaging 60% overall); and
- 60% of residential and 31% of small business customers in had switched to a gas market contract (averaging 59% overall).⁶

At the same time, the Commission noted that its own recent customer survey had indicated different levels of switching to a market contract:

- 60% of residential and 54% of small business customers in the case of electricity; and
- 42% of residential and 38% of small business customers in the case of gas.

In this report, for the purpose of reporting net margins in the market as a whole, we have assumed that 60% of electricity customers and 50% of gas customers are on market contracts. We recognise that there is uncertainty in these numbers, and that the proportions have varied over time.

⁶ *Review of the Effectiveness of Competition in Electricity and Gas Retail Markets in Victoria*, First Draft Report, Australian Energy Market Commission, 4 October 2007.

3. INPUT DATA AND INFORMATION USED IN THIS REPORT

This section reviews the sources of data and information used in this study, and the process that was followed to obtain the necessary inputs. Given the limited information provided by the Victorian retailers, we have relied heavily on information in the public domain.

3.1. DATA REQUESTS TO RETAILERS

Requests for information that combined information required by CRA for this study and other information required by the Commission were sent to all Victorian retailers by the Commission. The information requested included a broad range of items, including general information about the retailer, information about customer numbers, revenue data, customer transfer data, cost and margin information, energy sales volumes, and details of market offers to customers.

These data requests were made on the basis that any information provided by the retailers would not be used for any other purpose than the retail competition reviews being undertaken by the Commission, would be treated as confidential, and would not be published or disclosed in such a way as to reveal individual retailer information.

The data that was received from the retailers in response to the requests for information was quite varied, but in general provided much less detail than had been expected.⁷ As a result, very little recent data about retailer costs and revenues was available for this study.

Detailed information about numbers of customers and their energy consumption was also not available for this study. Since 2003, the Victorian Government has analysed the prices and underlying costs and margins of the Victorian electricity and gas retailers' standing offers and deemed contracts for prescribed customers, based on data and information in submissions made by the retailers. While the Commission had expected to receive permission from the Victorian retailers to enable CRA to use this material, this was also not the case.

As a result, and as described in the following section, CRA has largely relied on public information and to derive the estimates presented in this study.

⁷ For instance, data was not broken down by distribution area but included annual total figures only. Some retailers only provided data for some of the requested data items. Few of the retailers provided any information on costs and margins, other than indicating a range within which their per customer acquisition costs fell. None of the retailers provided historic market contract offer information.

8 November 2007

3.2. PUBLIC DOMAIN INFORMATION

In order to fill the gaps where data and information was required but was not received from the energy retailers, we supplemented the information obtained from the retailers with public domain information. As is set out in the following sections, this has resulted in there being considerable uncertainty in many of the estimates presented.

The following information was used:

- Data on expected electricity prices published by the Australian Financial Markets Association (AFMA);
- Electricity loss factors published by the Essential Services Commission Victoria (the ESC) and the National Electricity Market Management Company (NEMMCO);
- Standing offer tariffs published in the Victorian Government Gazette;
- Information on retailers' websites, particularly on market offers;
- Distribution and transmission use of system tariffs, and customer information published by the ESC; and
- Market fees published by NEMMCO.

We also used information and data that CRA has collected in the past from non-confidential sources, such as previous desk-top research on market offers. By its nature, however, this data did not include a full historic set of data over a period of time, or across any individual retailer or set of retailers, and therefore cannot be taken as providing a comprehensive view of the market at any particular point in time or over time.

4. RETAIL COSTS

Section 6 clarifies that net retail margins are the difference between retailers' revenues and costs, including operating costs. This and the following sections of this report consider the revenue and cost items that determine the margins of Victorian energy retailers. Below, we first comment on some conceptual issues relating to the various components that make up retailers' costs, and then describe the approach we have adopted in calculating those costs, for electricity and gas retailers, respectively. All monetary values in this and subsequent sections are in nominal Australian dollars of the years noted and exclude GST, except where otherwise stated.⁸

4.1. METHODOLOGY FOR ANALYSIS OF RETAIL COSTS

Electricity and gas retailers' costs comprise:

- Wholesale energy purchase costs;
- Network use of system charges; and
- Retailer operating costs, including some allowance for depreciation of capital.

These costs are discussed in detail in the following subsections. In practice, some conceptual and practical issues arise in the process of defining and measuring these costs, and we comment on these in the following paragraphs.

4.1.1. Costs of standing offers

We set out in Section 2 that retail contracts in Victoria are either standing offer or market contracts. Over time, the number of customers served on standing offer contracts has declined, and the number served on market contracts has increased. Nonetheless, our analysis of retailer revenues and costs (and therefore retailer margins) began by considering standing offers, since:

- We have a basis for assessing the costs associated with a full set of historical standing offers from published material; and
- Most market offers are structured according to the level of discount they provide with reference to the relevant standing offer.

We have therefore commenced our analysis of costs, offers and margins by first looking at standing offers, and then considering how market offers vary from the standing offers.

⁸ The analysis for all the regulatory decisions discussed in this report was undertaken excluding GST, and wholesale prices and retailer operating costs are also always similarly discussed excluding GST. However, retail price offers and early termination fees advertised to customers are generally quoted including GST. These conventions have been retained in this study.

4.1.2. Ex ante versus ex post estimates of margins

The Victorian Government has negotiated a retail price path with the local electricity and gas retailers, for the supply of energy to prescribed customers on standing offer contracts. This price path commenced on 1 January 2004, was amended in 2006 (for electricity only), and is due to expire on 31 December 2007.

The standing offer price levels under those price path agreements were based on assumptions, estimates and projections of cost that were made in 2003 (and re-visited in 2006), plus net margins that were deemed by the Government to be reasonable and consistent with the Government's policy objectives. While all the estimates were made based on the best available information at the time, projections and estimates always have margins for error, and the actual costs and margins that underpin the standing offer prices will certainly in practice have differed from those that were projected at the time.

In the absence of information from Victorian electricity and gas retailers on actual revenue and cost outcomes, this study has sought to estimate actual costs and margins on the basis of the historical information used and published by the Victorian Government at the time to determine retailers' standing offers.

4.1.3. Local retailer compliance costs

All retailers incur costs to comply with their licence and other obligations. Local retailers have compliance costs in regard to standing offer contracts that other retailers do not have.⁹ However, we do not have any evidence that these are significant in relation to other costs. All retailers bear risks from uncertainty that customers may switch from their current standing offer or market contracts to another arrangement with a different retailer. We have therefore not included an additional cost component for local retailer compliance costs.

4.1.4. Customer acquisition costs

The costs that arise for retailers offering standing offer contracts differ from those offering market contracts in one key respect. At least historically, standing offer tariffs did not make an allowance for customer acquisition costs. These offers were designed to be available on request, and not to be marketed to customers. In principle, local retailers do not therefore need to incur any acquisition costs in order to comply with their obligations to supply energy on the basis of standing offers – this is in contrast to market contracts where acquisition costs are incurred.

⁹ For example, local retailers are required to publish their standing offers in the Victorian Government Gazette, and to ensure that any price changes are consistent with the price path agreement.

Nonetheless, it could be argued that marketing and retention/acquisition costs are relevant to local retailers, since the consequence for such a retailer of large numbers of customers departing would result in an increase in retail costs per customer. This would occur due to loss of scale economies and the need for fixed costs to be amortised over smaller numbers of customers. Local retailers might therefore incur marketing and acquisition costs to stabilise their overall customer base, and thus forestall the rise in retail costs per customer that would result in the absence of customer acquisition and retention programs. This view is consistent with that expressed in an ESCOSA determination of standing contract retail prices for 2005-07, where explicit allowance was made for increasing operating costs to allow for loss of scale. ESCOSA stated:¹⁰

The Commission notes that a significant proportion of retail operating costs are attributable to salaries. It further notes that many of the remaining costs are fixed, and will not fall in direct proportion to the number of customers (e.g. billing system, call centre). However, the costs of these systems can be spread by AGL SA over its market contract gas and electricity customers.

Customer acquisition costs were also taken into account in a recent IPART decision, which we discuss further below.¹¹ The terms of reference for IPART's investigation specified that the allowances for retailer operating costs and retail margin should reflect those of a mass market new entrant, rather than those of retailers supplying regulated customers.

In summary, given that churn has progressed significantly in Victoria and that new entrant market shares are increasing, some recognition of customer acquisition costs as a practical matter and as a hedge against loss of scale would seem to be sensible when considering applicable retailer operating costs, and this approach has been adopted here.

4.1.5. Retail business acquisition costs

In regard to customer acquisition costs, a related question is whether (and if so how) the costs incurred by a retailer that acquires customers through the purchase of another energy retail business (as compared to growing market share by marketing directly to customers) should be considered when assessing retailer costs and margins. Whether a retailer opts to purchase customers or grow organically could be seen as a strategic decision by the business between two different means for increasing its customer base. For instance, this might be reflected in the strategies of retailers entering into the newly competitive Queensland market. AGL and Origin Energy were the winning bidders for Powerdirect and Sun Retail respectively. Other retailers have preferred an organic growth strategy for entering the Queensland market.

¹⁰ *Electricity Standing Contract Price, Price Determination, ESCOSA, December 2004.*

¹¹ *Promoting Retail Competition and Investment in the NSW Electricity Industry – Regulated Electricity Retail Tariffs and Charges for Small Customers 2007 to 2010, Final Report and Determination, June 2007.*

8 November 2007

In this sense, and from an economic perspective, it is difficult to identify a clear conceptual difference between customer and business acquisition costs. Customer acquisition costs can be viewed as incremental expenditure that is required either to compensate for the loss of some customers (and hence to maintain scale economies) or as a mechanism for achieving gradual cost reductions from better scale economies. The acquisition of an entire business (and therefore its customers) would seem to be more consistent with the second of these rationales, that is, achieving new scale efficiencies or other potential benefits, via a one-off transaction rather than through a gradual process. In some respects, a rapid growth strategy (that is, through business acquisitions, rather than a process of gradual customer acquisitions) is then simply an alternative to a gradual customer acquisition process and might be viewed as a legitimate component of retailers' operating costs.

This is not to say, however, that the costs of business acquisitions can simply be interpreted as multiples of the costs of customer acquisitions, since retailers undertake acquisitions for a variety of motives. Origin Energy's purchase of the Sun Retail business, for instance, equated to a value of \$1,100 per customer, and Origin Energy expected scale benefits of the order of \$20/customer/year. However, along with Sun Retail's customers, Origin Energy also acquired, among other things, competitively priced gas and the capacity (and announced plans) to build generation plant that would assist in increasing its margin per customer.¹² Clearly, as a practical matter, separating the different value components of a transaction may not be straightforward.

More generally, consideration of customer acquisition costs does not require us to be prescriptive about how and to what extent each individual retailer would attempt to acquire and retain customers. For instance, a retailer may elect to spend a certain sum of money each year to attract new customers. Alternatively, that retailer might choose instead to do buy a small retailing business from time to time (to the extent that such businesses are available for purchase). In this sense, the customer acquisition cost allowance described in Section 4.1.4 can be interpreted more broadly to encompass a range of activities designed either to retain or to grow the customer base.

Therefore, while the estimates in this study include a cost component for customer acquisition costs, we have not included an additional cost component for business acquisitions.¹³

4.2. WHOLESALE ENERGY COSTS

The following sections describe how the wholesale energy cost component of electricity and gas retailers' costs was derived.

¹² *Some Perspectives on QLD Post FRC*, IES, 18 December 2006. Summarised from Origin Energy, *Acquisition of Sun Retail*, 27 November 2006.

¹³ Section 6.4 does provide an indicative assessment of the impact that the inclusion of business acquisition costs would have on retailer operating costs.

8 November 2007

4.2.1. Electricity wholesale energy costs

Components of wholesale energy costs

Wholesale energy costs comprise the following items:

- Energy purchase costs based on a defined risk management strategy, including the use of contracts;
- Ancillary services costs;
- NEM participant fees;
- The costs of the bank guarantees that NEM participants are required to have;
- The costs of complying with renewable energy regulations; and
- Adjustments to allow for electricity losses.

All except three of these cost components can be modelled based on published actual data. The three components for which published actual data is not available are:

- Bank guarantee costs, for which a published benchmark of \$0.10/MWh has been used;¹⁴
- The costs of complying with renewable energy regulations, which were estimated based on prices at which Renewable Energy Certificates (RECs) have been traded;¹⁵ and
- Actual energy purchase costs, which is the largest component of wholesale energy costs, and the most difficult to estimate.

Retailers' actual energy purchase costs are discussed in more detail in the following subsections. These costs, which consist of a combination of contract and spot market purchases, are determined by a variety of factors, including a retailer's risk management policy, the timing of any contract purchases, the riskiness of a retailer's load profile, and other factors. Because of the difficulty of obtaining actual data on wholesale electricity costs, we have relied on the approach used in the analysis undertaken in 2003 to support the price paths for prescribed tariffs over the period 2004-2007, and have updated that analysis with more recent information where available.

14 This benchmark dates back to 2001. It was quoted in *Special Investigation: Electricity Retailers' Proposed Price Increases – Final Report*, Office of the Regulator-General, Victoria, December 2001. The amount is not material.

15 AFMA Environmental Product Curve: REC – Non wood waste, Median of Mids (Excl Outliers).

Analysis undertaken in 2003 to support the price path for 2004-2007

The 2003 estimates of electricity retailers' expected wholesale purchase costs were undertaken using forward contract price data published by AFMA. AFMA reports forward contract prices for wholesale electricity based on survey samples of contract market participants. While this data has some limitations, it was the best published source of contract data available at the time.¹⁶ The 2003 analysis was constructed as follows:

The analysis relied on half-hourly standing offer and deemed contract load profiles determined from analysis of the net system load profile (NSLP) for each distribution area. From this raw data, the following derived data was used:

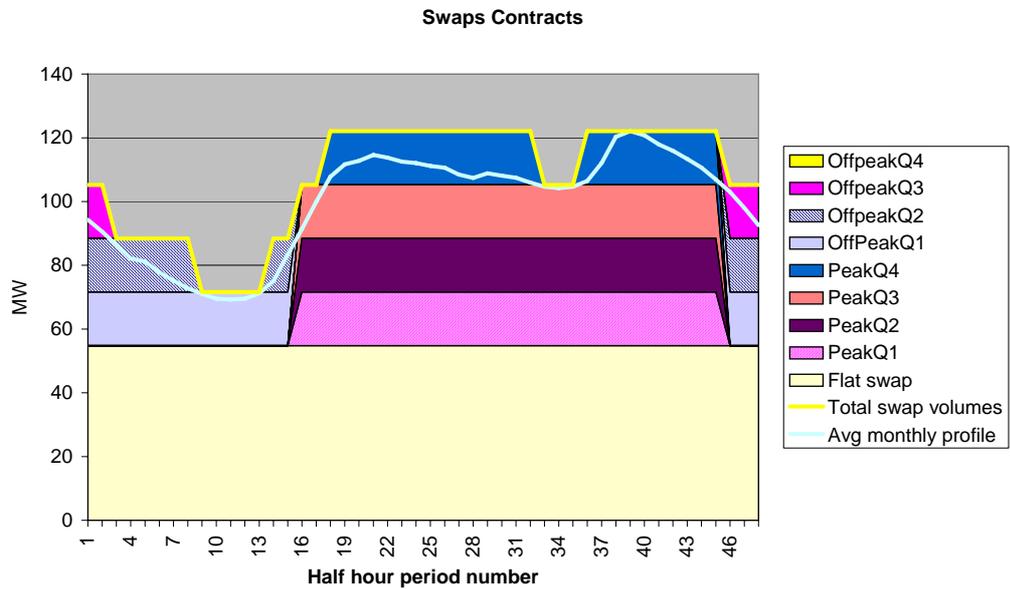
- Separate average profiles for the working and non-working days of each month;
- The annual minimum and maximum half-hourly demands (in MW) for both working and non-working days (Mn; Mx);¹⁷
- The maximum single half-hourly demand (in MW) in each month (P); and
- The total energy consumption for each month, which is the sum of the half-hourly consumptions over the course of the month.

It was assumed that a flat swap would be purchased to cover the minimum working day load (Mn) for all days of the year. Therefore, the flat swap volume equalled the minimum working day load (Mn, in MW) x 8760 hours. The volume between the minimum and maximum annual values was divided into four segments, each representing one quarter of the demand between the maximum and the minimum average demands. Each half-hour of the average monthly curve was allocated to one of these four quartiles. This quartile method resulted in reasonably small contract mismatches for the purposes of the analysis undertaken at the time. Subsequent sensitivity analysis was undertaken to review the fit, and an estimate of the additional costs was included in the price. This analysis is shown graphically in Figure 1.

16 These limitations include the fact that (a) AFMA data is based on the over-the-counter market, which generally trades small volume contracts and only represents a subset of the wider contract market, (b) the data covers only swap contracts, (c) not all traders provide contract information to AFMA, and (d) the data only represents generator or retailer price quotes (rather than the prices at which the trades actually took place).

17 Half-hourly demands in MW are obtained by taking half-hourly consumption values (in MWh) and multiplying by two.

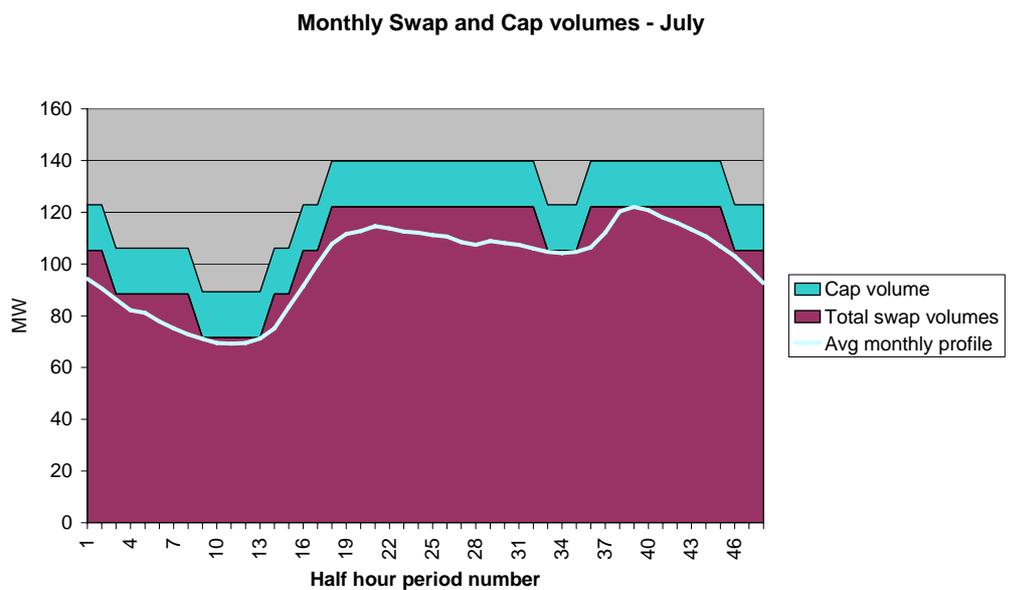
Figure 1: Swap contract volume allocation



Source: CRA analysis

In addition, cap volumes were calculated to cover unexpected load fluctuations around the average. The cap volumes were calculated individually for each month. In each month, the cap volumes were equal to the difference between 110% of the peak demand (in any half-hour) in the month and the swap contract volumes. Hence, for each month, cap volume = $(P \times 1.1 - M_x) \times \text{hours in month}$. This is shown in Figure 2.

Figure 2: Cap contract volumes



Source: CRA analysis

8 November 2007

The analysis of wholesale energy costs in 2004 (the first of the forecast years) used AFMA price data for the 24 months prior to the date at which the analysis was undertaken (i.e. October 2001 to September 2003 inclusive), on the basis that hedging over a 24 month period could be a reasonable hedging strategy for a retailer to adopt. Though retailers may engage in multi-year contracting, published contract price data is based on prices for individual years, and we therefore undertook separate pricing analysis for each calendar year for which energy was being purchased. The analysis of energy purchases for the calendar year 2004 covered the following four scenarios for the spread of purchases in those 24 months:

- A flat purchasing strategy whereby the same proportion of load was assumed to be hedged in each month;
- An “S-curve” purchasing strategy whereby a small proportion of contracts was purchased a long way out, the vast majority was purchased in the medium term, and the final small proportion was purchased very close in time to when it would be needed;
- Purchasing more when prices are lower and less when the prices are higher,¹⁸ and
- Purchasing more when the prices are higher and less when the prices are lower (to approximate possible market liquidity and credit issues).

As a result, a range of wholesale electricity purchasing costs was derived. This range of purchasing costs was deemed to be appropriate for a large portfolio retailer, including larger new entrant retailers. The analysis at the time did not seek to consider the differing energy purchasing strategies that might apply to smaller new entrant retailers.

Insufficient AFMA data was available in 2003 to undertake a similar analysis for the wholesale energy contract costs that were likely to pertain beyond 2004. The 2003 study therefore assessed a range of wholesale energy contract prices that were considered at that time as being possible outcomes. These estimates were needed, as the purpose of the 2003 analysis was to identify a practical range within which the Government and retailers could consider a future price path agreement.

Table 5 below shows the results of the analysis that was published in December 2003. to support the price path for 2004-2007, in relation to wholesale energy costs for the Victorian retailers supplying customers on standing offer contracts.

¹⁸ It should be noted that the third and fourth scenarios did not rely on hindsight to decide whether in any given month the prices are “higher” or “lower”. Rather, the methodology deemed prices in a given month to be “higher” or “lower” based on where the prices were in that month as compared to the previous six months in the AFMA price curve.

Table 5: Possible range of electricity wholesale energy purchase costs 2004-2007 (\$/MWh) as estimated in December 2003 to support standing offer price path

Year	Range of wholesale costs (\$/MWh)
2004	53-66
2005	53-72
2006	54-76
2007	55-84

Source: *Electricity and Gas Standing Offers and Deemed Contracts (2004-2007)*, prepared by CRA for Energy and Security Division, Victorian Department of Infrastructure, December 2003.

The results in Table 5 reflect the following considerations as discussed above:

- For 2004, estimated wholesale costs represented a range of possible outcomes of costs based on different model scenarios, and also differences between the costs of supply in different distribution areas, which result from differences in the load shapes and loss factors between the different distribution areas; and
- For the period 2005 to 2007, the analysis considered a broad assessment of possible outcomes. The fact that the range of wholesale electricity costs derived for these years widens over the period reflects the increasing uncertainty of outcomes as the analysis moved further into the future.

New analysis undertaken for this study

For the purposes of the present study, we have updated the forecasts of wholesale costs undertaken in 2003. This has been done by using AFMA data that was not available at that time regarding the forward contract prices for 2005 through 2007.

It is important to note that the AFMA data that has been used in the present study is the AFMA data that would have been available prior to each of the years of interest, which thereby allowed us to apply the same analysis for each of these years as was used for 2004 in the 2003 study. Thus, this is still an ex-ante study and it uses the same approach and the same underlying assumption as were used in the 2003 study. Nonetheless, we emphasise that in the absence of individual retailers' trading data, the wholesale electricity costs derived in this study should be regarded as being best estimates only.

8 November 2007

Table 6 below shows the monthly (unweighted) averages of the offer prices of various swap contracts for each of the calendar years 2004 to 2007 using the updated (but still forward looking) AFMA data described above. These figures represent swap contract purchase costs based on a flat purchasing strategy over the 24 months ending with the September before each calendar year¹⁹.

Table 6: Average monthly prices for swap contracts for the Victorian node (\$/MWh)

Calendar year	Months averaged (inclusive)	Average peak contract offer prices	Average off-peak contract offer prices	Average flat contract offer prices
2004	Oct 2001 – Sep 2003	\$53.67	\$24.15	\$36.86
2005	Oct 2002 – Sep 2004	\$50.95	\$23.09	\$35.03
2006	Oct 2003 – Sep 2005	\$48.77	\$22.82	\$33.89
2007	Oct 2004 – Sep 2006	\$48.76	\$24.17	\$34.70

Source: CRA analysis, based on AFMA data

We have used the AFMA contract prices reported in Table 6 to derive estimates of the actual electricity purchase costs incurred by the Victorian retailers. In making these estimates we have attempted to apply the wholesale energy costs for 2005, 2006, 2007 that might have been estimated immediately preceding each of these calendar years, by updating the component of the wholesale cost analysis for these years with the more recent AFMA data that is now available.

Table 7 shows our estimates of electricity retailers' wholesale purchasing costs for the years 2004-2007. These estimates were derived as follows:

- We used the average monthly prices for swap contracts that are shown in Table 6;
- We modelled purchases of swap contracts and cap contracts in exactly the same way that the modelling was done in 2003, as discussed above;
- We added costs to cover market fees, the smelter reduction levy (when it existed), bank guarantee costs, ancillary services costs, and REC costs; and
- We adjusted the results for line loss factors.

¹⁹ Only the flat purchasing strategy was used in developing estimates of wholesale electricity costs for the years 2005 – 2008. The other three hedging strategies were modelled only in the 2003 study.

8 November 2007

While the cost estimates of market fees, the smelter reduction levy, bank guarantee costs, ancillary services costs, and REC costs, and the adjustments for line losses are likely to be quite accurate, the estimates of electricity wholesale costs remain far more uncertain. This is largely because we have not been able to model each retailer's load shape and have not undertaken the depth of analysis and simulations that were previously undertaken. The figures reported in Table 7 represent our "best estimate" of the range of electricity wholesale purchased costs incurred by Victorian retailers over the relevant time frame.

Table 7: Estimates of electricity wholesale electricity purchase costs for large portfolio retailers 2004-2007 (\$/MWh)

Year	Range of estimates of wholesale costs (\$/MWh)	Mid-point of the range of estimates of wholesale costs (\$/MWh)
2004	53-66	59
2005	49-61	55
2006	48-60	54
2007	48-60	54

Source: CRA analysis

Note: Mid-points should not be taken as an indication that they reflect the most expected outcomes.

We note the following comments in respect of Table 7.

First, we have compared the estimates in Table 7 with actual NEM spot price outcomes between 2004 and 2007. During the period being analysed, electricity spot prices for the Victorian node did not move uniformly in the same direction as electricity contract prices in the AFMA database. Although over the long term it would be expected that average spot prices and average contract prices would be similar, this is often not the case over the short term due to the greater volatility of the spot price to individual events. It is also the case that the AFMA data itself has inherent limitations due to it being an incomplete record of contract prices.

At the same time, spot prices in the NEM do not necessarily provide a good basis for estimating the retailers' actual wholesale energy costs. As a general matter, retailers take only a limited exposure to spot prices, generally preferring to hedge most of their wholesale purchase risks. This suggests that contract costs are a more accurate determinant of retailers' electricity purchasing costs than spot prices. Provided that the published forward AFMA data is broadly representative of contract purchasing costs, the fact that there are differences between AFMA forward prices and actual outturn spot prices does not indicate that the cost estimates of electricity wholesale prices presented above are flawed.

8 November 2007

Second, and irrespective of the underlying levels of contract prices, actual wholesale energy costs incurred will differ between retailers, depending on each retailer's customer portfolio and hedging strategy. Through the use of more sophisticated risk management products, the large national portfolio retailers may be able to hedge their electricity purchase costs more efficiently and at lower cost. As noted below, costs per unit of electricity sold also differ geographically across the different Victorian distribution areas, because of differences in loss factors, among other things.

Third, small new entrant retailers are likely to incur higher costs for their wholesale energy hedging arrangements as compared to large portfolio retailers. This is because small new entrant retailers are likely to use load following hedges to cover part or all of their loads. Load following hedges place more volume and shape risk on the retailer's counterparty, and therefore are more expensive to purchase than the products purchased by the large portfolio retailers who do more risk management themselves. A retailer that is able to hedge all its load with load following hedges removes from itself all wholesale energy purchase risks and therefore should be prepared to accept a lower margin, i.e. there is counter-balance between risks and expected margins. The extent to which the lower risks offset the additional costs of hedging is unknown, and we have not attempted to quantify any additional costs and reduced margins for small retailers in this study that result from a load following hedging strategy as compared to the more sophisticated hedging strategies that are used by larger retailers.

Fourth, the results reported in Table 7 reflect the costs of various levies that applied over the relevant time horizon. The Smelter Reduction Levy was abolished from 1 July 2004, but a land tax was introduced on transmission easements. The land tax was not recovered from retailers in increased transmission use of system charges until 1 January 2005, but was recovered retrospectively.

Finally, Table 7 takes into account average losses in each distribution area, but the effects of differences in loss factors within each distribution area have not been quantified in this study.

The effects of loss factors on energy purchase costs can be quite significant – even within a single distribution area. For example, within the Powercor area, in 2007-08, transmission loss factors range between around 1.00 near to the edges of metropolitan Melbourne (for example, Altona and Brooklyn) to much larger factors in regional and rural parts of the network (for example, 1.08 at Bendigo, 1.10 at Horsham, 1.13 at Kerang, and 1.16 at Red Cliffs / Mildura). The impact of these different loss factors is that at the extreme 16% more energy has to be purchased to serve a customer in Mildura as against in Altona. All other things being equal, if the cost of energy to supply a customer in Altona is say \$60/MWh then it is almost \$70/MWh in Mildura. As is shown later in this report, energy costs comprise around 40% of total costs, so a difference of 16% in energy costs equates to a difference of over 6% in total costs, which could significantly affect margins. The implication of this is that to the extent that the geographic distribution of a retailer's customer base differs from the average within a distribution area, the impact of line losses on its actual energy costs will vary from those estimated in this study.

4.2.2. Gas wholesale energy costs

Components of wholesale gas costs

Wholesale gas costs are comprised of the following components:

- Gas purchase costs in the form of long-term bilateral contracts whose terms are confidential;
- Retailers' hedging costs to meet peak demands, for instance through the purchase of physical storage capacity;²⁰
- Charges levied on retailers by VENCORP, including charges related to the introduction of FRC for ongoing market services;
- Fees paid by gas retailers to the Office of Gas Safety; and
- The cost of Unaccounted for Gas (UAFG), the difference between the metered total amount of gas injected into the Victorian distribution system and that withdrawn. UAFG includes leakage or other actual losses, discrepancies due to metering inaccuracies and variations of temperature, pressure and other parameters.

Analysis undertaken in 2003 to support the price path for 2004-2007

The major contract for purchasing gas at the time of the 2003 analysis was the Gascor contract. Although terms of this contract are confidential, some aspects of the contract were known. It was understood that the terms of that contract allowed for a year-on-year price increase of CPI. Exceptionally, there was to be a price reset with a further increase in 2004, but it was understood that there was no further reset in the contract until at least 2007. Given that, at the time, the overwhelming majority of gas supplied in Victoria came from the Gascor contract, it was therefore reasonable to assume that gas spot prices on average followed the Gascor contract prices.

The assessment of costs associated with hedging was based on the various options for hedging using physical contracted capacity that were known to be available in the market, including gas purchase contracts, the Western underground storage facility, and the LNG storage facility.

²⁰ Retailers need to contract for sufficient capacity to meet their customers' maximum daily requirements, and to hedge against risks that can also include uplift payments arising from unexpected intra-day events.

8 November 2007

The combination of gas purchasing costs described above, including charges, fees, and UAFG formed the basis for the 2003 estimate of retailers' wholesale gas costs. For 2004, this cost was estimated to be \$3.50/GJ. It was expected that annual gas wholesale costs would increase by CPI+2. Additionally, while the 2003 report did not disaggregate the \$3.50/GJ estimated gas acquisition costs into component parts, analysis undertaken a year earlier for the year 2003 found that a total estimated wholesale gas cost of \$3.29/GJ had a commodity purchase component of \$2.87/GJ.²¹

New analysis undertaken for this study

To test the estimates for the cost of wholesale gas that were made in 2003, we first analysed the daily prices and withdrawal information published by VENCORP, taking monthly weighted averages. Table 8 below shows the range of these monthly weighted averages and the overall annual weighted averages of Victorian spot prices for gas for the calendar years 2004, 2005 and 2006, and for January 2007 – up to the implementation of the new wholesale market for gas in Victoria on 1 February 2007.

Table 8: Weighted average Victorian gas spot market prices

Year	Monthly weighted average prices (\$/GJ)	Annual weighted average price (\$/GJ)
2003	2.84 to 3.06	2.91
2004	2.86 to 3.18	3.03
2005	2.93 to 3.28	3.04
2006	2.49 to 4.29	3.16
2007 (January only)	3.29	-

Source: CRA analysis, based on VENCORP data

Table 8 illustrates that over this period the Victorian gas spot market has changed, with an increasing spread of prices. Spot prices have gone below long-term contract prices on low demand days, presumably due to oversupply, and have gone substantially above long-term contract prices on high demand days when there may have been shortfalls in supply.

Since the implementation of the new wholesale gas market in February 2007, the volatility of spot gas prices has increased still further, with five spot prices being reported each day. Prices in the period 1 February to 30 July 2007 ranged from zero to \$3.36/GJ, with prices able to rise to the Value of Lost Load (VoLL), which is now set at \$8.00/GJ. This demonstrates the increased volatility in the gas market, including the higher costs of gas at times of peak demand.

²¹ *Electricity and Gas Standard Offers and Deemed Contracts (2003)*, prepared by CRA for the Victorian Government Department of Natural Resources and Environment, December 2002.

8 November 2007

In the absence of information from retailers on delivered wholesale gas costs, we also undertook a literature search of gas contract prices for delivery in Victoria as reported over the last few years:

- In December 2003, analysts suggested a price equivalent to \$2.84/GJ would underpin contracts concluded between producers Esso Australia and BHP Billiton Petroleum and retailers AGL and TXU Australia for the supply of more than 1800 PJ of gas from the Bass Straits from 2004 to 2017;²²
- In November 2005, a draft recommendation from the National Competition Council referred to various estimates of prices from gas fields that supply Victoria and other eastern states:²³
 - ESCOSA estimated the Cooper/Eromanga ex-plant price to be \$2.90/GJ in 2004-05;
 - Epic Energy estimated that price to be between \$3.10 and \$3.15/GJ, and estimated the Otway Basin price at \$3.10/GJ and the Gippsland Basin price to be \$3.05-\$3.10/GJ;
- In December 2006, AGL was reported to have access to 540-740 PJ of coal seam gas in Queensland over 20 years, at prices of \$2.40-\$2.60/GJ;²⁴ and
- In July 2007, in the context of a report on wholesale gas prices in Western Australia, it was noted that wholesale gas contract prices in Victoria and NSW are around \$3/GJ.²⁵

In conclusion, we note that wholesale gas prices have risen substantially in Western Australia, and future gas prices have risen across Australia. While the Victorian retailers' future wholesale gas acquisition costs may rise after 2008, there is no information that seems to suggest that their wholesale gas acquisition costs for 2004-2007 have diverged significantly from those that were estimated in 2003, and therefore those previous estimates have been retained in this study.

The delivered costs of gas (including charges, fees, and UAFG) used in this study are as shown in Table 9 below. These costs are based on taking the value of \$3.50/GJ estimated for 2004, and increasing each year thereafter by CPI+2.

²² *Bass gas partners seal \$5b in deals*, The Australian, 24 December 2003.

²³ *Application for revocation of coverage of the Moomba to Adelaide Pipeline System under the National Gas Access Regime*, Draft Recommendation, National Competition Council, November 2005.

²⁴ Gas Week, 14 December 2006.

²⁵ *WA boom fuels gas price rise*, The Age, 9 July 2007.

Table 9: Assumed delivered costs of gas (including charges, fees, and UAFG) 2004-2007 (\$/GJ)

Year	Delivered costs of gas (\$/GJ)
2004	\$3.50
2005	\$3.63
2006	\$3.81
2007	\$4.02

Source: CRA analysis

4.3. NETWORK CHARGES

Network charges for delivered electricity and gas comprise:

- Transmission use of system charges;
- Distribution use of system charges; and
- Additional network charges, such as excluded services, FRC charges, metering provision and metering data services charges.²⁶

Wherever applicable, these elements of network charges have been included in our analysis of electricity and gas costs. However, we have excluded those network charges that retailers simply pass through to customers as they arise, and which are charged in addition to the standard tariff and contract prices reported in this study. These additional network charges include charges for special meter reads, connections and disconnections, etc.

Network charges vary depending on the network tariff applicable to the customer, which depends on whether the customer is residential or small business and the type of tariff (such as single-rate, two-rate, and with or without controlled load in the case of electricity). Network charges also vary by distribution area. But for any given customer, the identity of the retailer does not change the network charges – network charges are not discriminatory between retailers. Our approach to the estimation of network charges is based on published use of system tariffs.

Our new analysis now has the benefit of having the actual network use of system tariffs for the years 2005-2007. However, the retailers' customer and usage data was not available for this study, and therefore we have relied on customer numbers and usage submitted by the distributors and published by the ESC in regulatory proceedings.

²⁶

In Victoria (and elsewhere in the NEM), the costs of metering and meter data services for small end customers are generally included as part of the network costs charged by the local distribution company rather than being separately incurred by retailers.

8 November 2007

4.3.1. Electricity network charges

Based on the distributors' submissions to the ESC and the published network tariffs, CRA has estimated what average electricity network charges applying to prescribed customers may have been in each year from 2004 to 2007 in each Victorian electricity network area. Because the distributors' submissions to the ESC show the change in tariff charges for each individual tariff, we have to some extent been able to take into account tariff rebalancing between prescribed customers and larger usage customers.

The results of our new analysis are shown in Table 10 below. These network charges have been calculated based on published fixed charges and c/kWh tariffs that have been converted to \$/MWh. Because the electricity distributors pass on transmission use of system charges as well as distribution use of system charges to the retailers and publish joint network use of system charge tariffs, we have reported network use of system charges as a whole. These results are only estimates of network use of system charges; the actual charges will depend on the actual customer mix for each retailer.

Table 10: Estimates of average electricity network charges incurred by Victorian retailers for supply to prescribed customers 2004-2007 (\$/MWh)

Year	Mid-point estimates of electricity network charges by network area (\$/MWh)				
	AGL Networks	CitiPower	Powercor	SP AusNet	United Energy
2004	60	57	62	60	65
2005	65	63	69	61	69
2006	63	56	60	56	60
2007	65	57	60	63	60

Source: CRA analysis, based on electricity distributor's submissions to the ESC and published network tariffs

To illustrate the analysis that we have undertaken, Table 10 shows that between 2006 and 2007 the network charges in the SP AusNet area increased by a substantially higher amount than in any other Victorian distribution area. There were several factors that led us to reach this conclusion:

- One of the components of the allowed distribution use of system charges is an S-factor that represents the reliability performance of the network. The S-factor allowance for tariff changes in 2007 was higher in the SP AusNet area than in any of the other Victorian distribution areas.
- There was substantial rebalancing of transmission use of system tariffs between the Victorian distribution areas. In the SP AusNet area, the transmission use of system tariffs increased by 24% between 2006 and 2007.

- SP AusNet rebalanced its distribution use of system tariffs between 2006 and 2007. While the overall increase in distribution use of system tariffs in 2007 was 4.0%, SP AusNet achieved this by reducing some of its tariffs that apply to large customers (i.e. customers that are not prescribed customers), while increasing the tariffs that apply to prescribed customers by as much as 8.8%. We have taken account of this rebalancing in our analysis.

We note that the Victorian Government operates a Network Tariff Rebate (NTR) scheme in Victoria, which gives a rebate to prescribed electricity customers in the Powercor and SP AusNet distribution areas. The rebate scheme is operated through retailers, and the rebates can be regarded as co-payments on customer bills. Retailers are paid administration costs of running the scheme, which is administered for the Government through VENCORP. As such, the scheme is unlikely to affect the prices or margins of the retailers.

4.3.2. Gas network charges

Gas distribution charges depend on usage per connection point per day. Unlike for electricity, there has been no new gas distribution price determination in Victoria since the price path was put into place in 2003.²⁷

There has also been no new gas transmission price determination in Victoria. Gas transmission costs are based on how much gas is injected and withdrawn from the transmission system at given points on given days, and also include charges for peak gas day quantities. Detailed analysis of gas transmission costs can be quite forensic, and the charges can be quite difficult to estimate. Further, there is a possibility of trade-off between gas purchasing costs and transmission costs – retailers may be prepared to pay more for the gas commodity that can be injected into the Victorian gas transmission system at a different point if there is a corresponding reduction in transmission charges as a result.

Given the difficulties in estimating gas transmission and distribution charges in the absence of detailed information about customers, and given that there has been no change to either the distribution or transmission charging regime since the price path was put in place, we have not changed our approach to estimating gas network charges from what was used in 2003. Our estimates for gas network charges are shown in Table 11 below; these figures include various fees and charges, including metering and FRC charges raised by the distributors and VENCORP.

²⁷ The current distribution pricing arrangements were put in place for the five-year period from 1 January 2003 to 31 December 2007.

Table 11: Estimates of average gas network charges incurred by Victorian retailers for supply to prescribed customers 2004-2007 (\$/GJ)

Year	Mid-point estimates of gas network charges by retailer (\$/GJ)		
	AGL	Origin Energy	TRUenergy
2004	4.60	4.40	5.20
2005	4.74	4.50	5.31
2006	4.94	4.65	5.50
2007	5.17	4.84	5.71

Source: CRA analysis

4.4. RETAILER OPERATING COSTS

In the following we set out how our estimates of retailer operating costs have been derived.²⁸ The convention in the price regulation arena is to use the term “retailer operating costs” to mean the costs of operating a retail energy business, rather than in the formal accounting and finance sense of discriminating operating from capital costs. Following on from that, price regulation practice:

- Has generally assumed that working capital costs will be recovered in the net margin (rather than treating the cost of working capital as an operating cost, which would be consistent with accounting and finance practice); and
- Has made allowance in retailer operating costs for the capital costs of FRC information technology (IT) systems by allowing a per customer dollar amount that represented the amortised costs of such systems; the return on that capital is assumed to be included in the net margin.

We have followed that convention in this study, though we recognise that it differs from the approach conventionally adopted for regulatory accounting purposes in other areas.

In the following, we first describe the various cost categories that make up what are referred to as retailer operating costs. We then describe the evidence in the public domain on retailer operating costs and outline the analysis undertaken for the present study.

²⁸ The discussion of the nature of retailer operating costs in this section of the report draws on a public report that CRA wrote for the Queensland Competition Authority: *Calculation of the Benchmark Retail Cost Index for 2006-07 and 2007-08*, prepared by CRA for the Queensland Competition Authority, 7 May 2007. This report was specifically in relation to electricity rather than gas, but the same cost categories apply to gas, so this discussion is relevant to both fuels.

4.4.1. Categories of retailer operating costs

Electricity and gas retailer operating costs comprise the following categories of cost:

- *Billing costs*: Billing costs include the activities of validating data for billing, creating bill-ready data, printing and mailing of periodic bills. Much of the cost of billing activities comprises the fixed cost of IT systems. The variable component of the costs of billing is driven by the number of bills that are issued, which is in turn a function of the number of customers and the billing cycle (generally monthly, bi-monthly or quarterly). Each bill also generates a collection cost when the customer pays the bill.
- *Customer call centre costs*: Customer call centre costs involve some fixed costs of establishing the retailer's call centre and the systems and procedures for operation of the call centre. Staff costs make up a significant portion of ongoing operational costs. The number of required staff is directly related to the number of calls made to the call centre, which is driven by the number of customers that are served by the retailer.
- *Credit management costs*: Customers generally pay in arrears for the costs of the electricity they consume, and credit management is therefore an important issue for retailers to address, to ensure that working capital requirements and provisions for bad debt are minimised. Credit management costs include hardship and similar policies to assist customers with payment policies. The costs of credit management are largely driven by the size of the business.
- *The costs of energy trading activities*: These costs include the staff costs of engaging in energy trading, in particular personnel costs. For a given fuel (electricity or gas), these costs are driven by the size of the business, although the complexity of the electricity and gas markets differ.
- *Corporate overheads*: These include treasury functions, human relations and facilities management functions. They are generally driven by the size of the business.

8 November 2007

- *The costs of IT systems:* IT costs are largely driven by the size of the business. For a given retail business, the gain or loss of a few customers or does not change the IT costs of the business. Instead there are step changes when the business grows substantially and a new IT architecture is needed. IT costs are not necessarily a cost category apart from other cost categories – rather, these systems support the other categories of activity – such as billing and customer call centres.²⁹
- *Other costs:* Retailers incur other costs, but these are not generally itemised – due to their small materiality as compared to the larger cost categories discussed above. These include the costs of regulatory compliance, licensing fees, ombudsman costs, and settlement validation costs.

4.4.2. Electricity retailer operating costs

Regulatory determinations

This section discusses the allowances that have been made for retailers' operating costs in regulatory decisions in other Australian jurisdictions. Table 12 below provides an overview of these costs estimates, which are further discussed below.

Table 12: Summary of most recent decisions on retailer operating costs for Australian electricity retailers

Jurisdiction	Date of decision	Allowance (\$nominal/customer /yr)	Comments
ACT	June 2007	\$94.91	Inflation adjustment of the 2003 decision
NSW	June 2007	\$105.00	Includes an allowance for customer acquisition costs of \$30 per customer
QLD	May 2007	\$75.00	Excludes any allowance for customer acquisition or marketing
SA	December 2004	\$84.41	Included escalation to \$89.14 (in \$ March 2005) for 2007, and also included an allowance for the effect on scale economies due to loss of scale
	August 2007 (draft)	\$96.00	In \$ March 2008, reducing in real terms by 5% per annum to \$83.39 in \$ March 2008 in accordance with AGL SA's projected reductions in operating costs

29

We note that for accounting purposes, some of the IT systems costs may be classified as capital costs and depreciated over a period of time, depending on the appropriate accounting standards. Alternatively, the retailer may buy in IT services and simply pay IT service costs as operating costs, in which case those costs will take into account the operating costs and depreciation of the ultimate asset owner. The benchmarking approach taken in this study does not draw a distinction between these two models for purchasing of IT services, and thus does not explicit differentiate between depreciation of capital as against the payment of service fees.

8 November 2007

Jurisdiction	Date of decision	Allowance (\$nominal/customer /yr)	Comments
TAS	September 2003	\$76.67	Based on upper-end benchmarks from ACT, SA, NSW and VIC, but with FRC costs omitted and an allowance for economies of scale and scope included
	July 2007 (draft)	\$85.00	Based on a benchmarking approach and expressed in \$ June 2006

Source: CRA analysis of regulatory decisions

It is apparent that the estimates in Table 12 vary by jurisdiction:

- ACT:** The ICRC allowed \$94.91 per customer for retailer operating costs for 2007-08. This was based on an inflation adjusted allowance of \$85/customer from 2003, which itself was based on an upper-end benchmark at the time of \$80 from Victoria and South Australia, plus an addition for diseconomies of scale in ACT. The ICRC also allowed ActewAGL a value of \$15.09 per customer to cover the costs of loss of economy of scale from erosion of the customer base that was on regulated contracts.
- New South Wales:** IPART recently considered that the retailer operating costs for a mass market new entrant in New South Wales are around \$75 per customer, excluding any customer acquisition costs.³⁰ IPART expected downward pressure on retailer operating costs due to improvements in productivity, and therefore did not consider that retailer operating costs were increasing each year with wage inflation or CPI or any similar efficiency measure.
- Queensland:** During 2007, CRA undertook a review of retailer operating costs in a report to the Queensland Competition Authority, and found that a reasonable value for retailer operating costs in 2007-08 for a retailer operating to scale in an FRC environment would be \$75 per customer.³¹ This figure excluded any allowance for customer acquisition costs.
- South Australia:** In December 2004, ESCOSA set an allowance for retailer operating costs that ranged from \$84.41 in Q1 2005 to \$89.14 in Q4 2007 (\$March 2005).³² These figures were based largely on inter-state benchmarks. They also allowed for a decline in the number of standing contract customers, thus requiring fixed costs to be spread across fewer customers.

³⁰ *Promoting Retail Competition and Investment in the NSW Electricity Industry – Regulated Electricity Retail Tariffs and Charges for Small Customers 2007 to 2010*, Final Report and Determination, June 2007.

³¹ *Calculation of the Benchmark Retail Cost Index for 2006-07 and 2007-08*, prepared by CRA for the Queensland Competition Authority, 7 May 2007.

³² *Electricity Standing Contract Price*, Price Determination, ESCOSA, December 2004.

8 November 2007

In a more recent draft determination, ESCOSA reported that AGL SA had requested an allowance of \$96 per customer (in \$March 2008) for retailer operating costs, to remain constant in real terms and to apply from January 2008 to June 2011. ESCOSA also noted that AGL had announced that under Project Phoenix its retailer operating costs would reduce to \$86/customer. ESCOSA saw this AGL initiative as being indicative of the type of efficiency changes that other retailers are also implementing, and stated a belief that the resultant cost savings should be shared with customers. In its draft determination, ESCOSA therefore accepted AGL SA's request for a retailer operating cost allowance of \$96 as at January 2008 (in \$March 2008), but proposed to reduce this in real terms by 5% per annum until December 2010, at which point the allowance would be \$83.39 per customer (in \$March 2008).³³

- *Tasmania*: In September 2003,³⁴ OTTER allowed Aurora Energy retailer operating costs of \$76.67 per customer (in \$May 2003). The Electricity Supply Industry (Price Control) Regulations 2003 required the Regulator to maintain the retailer operating costs per customer in real terms as per the 2003 Determination. The retailer operating costs per customer was \$74.66 in June 2002. Allowing for CPI adjustments, an allowance of \$83.72 per customer was put in place for 2007. This was based on upper-end benchmarks from ACT, SA, NSW, and Victoria, with FRC costs deducted from those benchmarks, and instead an additional allowance for lack of economies of scale and scope. However, in a more recent draft decision in July 2007, OTTER has proposed to allow Aurora Energy \$85 per customer (in \$June 2006), based on a benchmarking approach.³⁵

Other public sources

In a presentation in February 2007, AGL estimated that once it had realised efficiency gains in Project Phoenix, its retailer operating costs per customer would reduce to \$68/customer. AGL estimated that if it were to merge with Origin Energy (as was contemplated at the time), retailer operating costs would reduce to \$55/customer due to further scale economies.³⁶

³³ 2007 Review of Retail Electricity Price Path, Draft Inquiry Report & Draft Price Determination, ESCOSA, August 2007.

³⁴ Investigation of Prices for Electricity Distribution Services and Retail Tariffs on Mainland Tasmania, Final Report and Proposed Maximum Prices, OTTER, September 2003.

³⁵ Investigation of Prices for Electricity Distribution Services and Retail Tariffs on Mainland Tasmania, Draft Report and Proposed Maximum Prices, OTTER, July 2007.

³⁶ AGL's view of potential merger benefits, February 2007.

8 November 2007

It has also been reported that cost savings currently being implemented by AGL “*would cut the annual cost of servicing a customer from \$91 to \$68, a saving of 25 per cent*”.³⁷

These figures indicate that the \$90 retailer operating cost figure used in earlier price determinations and the \$75 figure more recently adopted were probably good approximations. They also provide an insight as to how variations from the assumed benchmark operating costs can cause retailers’ outturn margins to differ from those estimated as part of the standing offer calculation process.

Analysis undertaken for this study

For the present study, we have separately estimated retailer operating costs and customer acquisition costs. To arrive at a revised retailer operating cost estimate for the purposes of this study, we have considered which of the estimates described above are likely to be most applicable in the Victorian context.

Where retailer operating costs net of customer acquisition costs are concerned, the analysis that was published in December 2003 to support the Victorian price path for 2004-2007 used a figure of \$90 per customer from 2003.³⁸ This was largely on the basis that this was a close approximation to the retailers’ views of their annual retailer operating costs for standing offer customers, and that there was an absence of any recent research concerning retailer operating costs.

Our analysis of the current position of energy retailers suggests that the large portfolio retailers have reached scale on a national basis, with millions of customers in the case of AGL and Origin Energy, and as shown in Table 3 and Table 4, loss of customers on standing offer contracts has not reduced their scale in Victoria.

Small new entrant retailers do not have those scale economies, but can make up for their lack of scale by contracting out. These out-sourcing options provide a wide range of services generally including customer care, customer transfer, billing, credit and collections, reporting, systems support and systems management. The basic premise is that the service provider’s capital expenditure in systems acquisition and development will be spread over many clients, thereby providing a large measure of the benefits of scale to new entrants.³⁹

³⁷ Australian Financial Review, 21 August 2007.

³⁸ *Electricity and Gas Standing Offers and Deemed Contracts (2004-2007)*, prepared by CRA for Energy and Security Division, Victorian Department of Infrastructure, December 2003.

³⁹ As an example, the website of one such service provider makes the following claim: “This unique model has been specifically designed to enable fast, efficient and cost-effective market entry” (www.serviceworks.com.au).

8 November 2007

New entrants are also not burdened with expensive legacy systems that some of the more established retailers may have. Very small new entrant retailers will have very small scale initially – therefore much larger retailer operating costs per customer (as each customer must bear a higher proportion of any fixed retailer operating costs). Small new entrant retailers seek growth to counter this lack of scale, and to increase the value of their businesses. These retailers' higher initial costs have not been accounted for in this study; they have been assumed to constitute a form of start-up cost. These higher costs (and the lower margins they imply) have not kept Victoria from enjoying the highest level of new entrant activity of any NEM jurisdiction, and there has been an exceptionally low rate of business failure or market exit on the part of small new entrants in Victoria.

Of the benchmarks that have been considered in this study, we believe that the one that is most relevant to the Victorian local retailers is the finding of IPART that *“the retail operating costs of a mass market new entrant retailer without access to economies of scope from a shared distribution/retail business are likely to be towards the top of the range recommended by Frontier Economics of \$60 to \$80 per customer per year”*.⁴⁰ For that reason, IPART determined that a retailer operating cost of \$75 per customer, excluding customer acquisition costs, was appropriate. The description of the retailer considered by IPART matches the Victorian retailers in the following ways:

- The retailer considered by IPART is one that has achieved scale (around 900,000 customers) in a jurisdiction outside NSW. That jurisdiction is likely to be Victoria; thus the characteristics of the retailer considered by IPART are likely to be similar to those of the Victorian local retailers.
- The mass-market new entrant retailer considered by IPART is not one that is affiliated with a distribution business; this too matches the Victorian retailers' position.

In contrast, in other jurisdictions:

- Aurora Energy in Tasmania received a higher allowance based on much smaller scale. The allowance to ActewAGL in the ACT also allowed for diseconomies of scale. These issues of small scale are not appropriate to apply to Victoria.
- ESCOSA's allowances to AGL SA have been made on the basis of considering only standing offer customers and allowing for loss of scale when customers move off standing offer tariffs, even if they move to market contracts with the same retailer. In reality, loss of customers on standing offer contracts has not materially reduced the scale of any of the large retailers that are the local retailers in Victoria, and therefore the benchmark from South Australia is not applicable to Victoria.

⁴⁰ *Promoting retail competition and investment in the NSW electricity industry – Regulated electricity retail tariffs and charges for small customers 2007 to 2010*, Electricity – Final Report and Final Determination, IPART, June 2007, p.96.

8 November 2007

Based on these benchmarks, we conclude that \$75/customer is a reasonable benchmark to use in this study for retailer operating costs excluding customer acquisition costs. We note that use in this study of \$75/customer for retailer operating costs contracts with the values of \$90/customer and above that were previously allowed in Victoria. However, those higher values were put in place based on lack of other available information at the time, and were based on consideration of five standalone businesses, each operating in one distribution area, rather than looking at the overall scale of the retail businesses across Victoria and nationally.⁴¹

By way of comparison, even before implementation of Project Phoenix, AGL's stated \$91/customer retailer operating costs (which include customer acquisition costs) equate to less than \$75/customer if customer acquisition costs are excluded. AGL's stated retailer operating costs per customer for 12 months to June 2006 were \$85.60/customer; for the 12 months to June 2007 they were \$84.50/customer. Again these figures include customer acquisition costs. Thus, on this evidence, even an estimate of \$75/customer excluding customer acquisition costs may be over-stated.

In the past, customer acquisition costs have typically not been taken into account in regulatory determinations. The notable exception is the recent IPART decision, where customer acquisition costs were explicitly calculated and incorporated.⁴² IPART's allowances for customer acquisition costs were based on the actual cost of acquiring a customer (\$200). These costs included all costs relating to marketing to new customers and the costs associated with the process of transferring customers.⁴³ The final allowances that IPART determined for customer acquisition costs were:⁴⁴

- For residential customers: \$29/year – based on amortisation of acquisition costs over an eight-year period of customer retention;
- For small business customers: \$37/year – based on amortisation of acquisition costs over a six-year period of customer retention; and
- A weighted average of these figures for residential and small business customers gave an overall result of \$30/year.

41 We further consider the sensitivity of margin estimates to different retailer operating costs in Section 6.2.

42 *Promoting Retail Competition and Investment in the NSW Electricity Industry – Regulated Electricity Retail Tariffs and Charges for Small Customers 2007 to 2010*, Final Report and Determination, June 2007.

43 IPART reports that these costs included sales overheads, credit checking, communications/stationery/information booklets/confirmation packs, data and processing/customer transfers/registrations, door to door/commission/agent costs, postage, and telecommunications costs.

44 In its final decision, IPART adjusted its earlier estimates downwards by \$5 per customer to account for any double counting between retailer operating costs and customer acquisition costs.

8 November 2007

In order to derive customer acquisition costs for this study, we took estimates in retailers' submissions to the Commission and amortised these on a straight-line basis across the expected life for residential and small business customers, based on NEMMCO churn statistics of 4 and 3 years respectively. We then developed a weighted average with reference to the spread and weighted average of the residential and small business annualised acquisition costs determined in by IPART. This results in annualised acquisition costs for market contract electricity customers as shown in Table 13 below.

Table 13: Electricity customer acquisition costs (\$/customer/yr) as derived from retailer submissions to the Commission

Residential customers	Small business customers	Weighted average
\$42	\$90	\$49

Source: CRA analysis

To conclude the discussion above, excluding acquisition costs, the estimate of \$75 per customer – which must be applied to all customers – is lower than the allowance that was provided in the four-year price path analysis, and thus will tend to increase the margins shown for standing offer customers from the figures that have previously been published. By contrast, the addition of the estimate of \$49 for customer acquisition costs – which is only applied to the proportion of the retailer's customer base that is on market contracts – represents a higher retailer operating cost than had been assumed previously.

4.4.3. Gas retailer operating costs

Gas retailing in Victoria takes place on a smaller scale operation than electricity retailing. Therefore, if the retailer operating costs of gas retailers were to be considered on a standalone basis, the costs per customer would be higher in the case of gas, because of the smaller numbers of customers over which to amortise fixed costs. These fixed costs include FRC costs, which are amortised across fewer customers in gas than in electricity – particularly because gas markets are jurisdictionally based whereas much of the electricity market is run nationally (the NEM).

It is unclear whether retailer operating costs for gas are different than those for electricity. In practice, gas retailing is run alongside electricity retailing – we note that no retailer offers to supply gas to prescribed customers in Victoria but does not offer to supply electricity.

ESCOSA proposed that gas retailer operating costs are lower than electricity retailer operating costs, because gas customers call the call centre less frequently than electricity customers, and there are lower bad debts and fewer disconnections.⁴⁵ ESCOSA found that these differences should only affect retailer operating costs at the margin.

⁴⁵ *Gas Standing Contract Price Path*, Final Inquiry Report and Final Determination, ESCOSA, June 2005.

8 November 2007

At the same time, in Victoria electricity meters are generally read and bills are produced every three months, whereas gas meters are read and bills are produced every two months. Thus gas may have higher billing costs than electricity, but this may be balanced by the fact that working capital requirements should be lower. The gas market is also increasing in complexity, which may cause retailer operating costs to be higher.

Taking all the above factors into account and in the absence of information to the contrary, in this study we have used the same retailer operating costs for gas as we did for electricity (excluding customer acquisition costs).

With regard to customer acquisition costs, we have adopted the same approach as for electricity. That is, we have taken submissions from the retailers to the Commission for this study, amortised these on a straight-line basis, and developed a weighted average (Table 14). We note that some retailers may be able to operate at lower cost through offering a dual fuel product of electricity and gas together. This is discussed further in Section 5.3 below.

Table 14: Gas customer acquisition costs (\$/customer/yr) as derived from retailer submissions to the Commission

Residential customers	Small business customers	Weighted average
\$21	\$36	\$23

Source: CRA analysis

8 November 2007

5. RETAIL OFFERS AND REVENUE

The previous section of this report considered the costs incurred by Victorian energy retailers in serving customers. This section now describes the approach that we have adopted to assess retailers' revenues from standing offers and market contracts. In Section 6, the revenue estimates are combined with the cost information in the previous section to enable margins to be estimated as the difference between revenues and costs.

5.1. STANDING OFFERS

The prices that apply to standing offers are published in the Victorian Government Gazette, and are based on standard published terms and conditions. However, while the corresponding price path tells us by what percentages the prices of electricity and gas on standing offers have moved up or down each year of the price path, it is not possible to infer directly the retailers' revenues from customers on standing offers in each year. This is because calculating an average price per unit of energy sold and therefore the retailers' revenues requires knowledge of customer usage and the bands in which their consumption falls in each of the standing offer tariffs.

In the absence of detailed information about customers, we have therefore again relied on distribution businesses' customer numbers and usage data used to estimate network charges (Section 4.3). We applied that data to estimate the average prices of standing offers in 2003, and then used the price path (as discussed in Appendix A), to adjust those numbers by applying the appropriate price change for each of the following four years. The results are shown for electricity and gas standing offers in Table 15 and Table 16 below, respectively.

Table 15: Estimates of average electricity standing offer prices by distribution area (2003-2007)

Year	Year-on-year changes	Average \$/MWh electricity standing offer prices				
		AGL Networks	CitiPower	Powercor	SP AusNet	United Energy
2003	Starting Point \$/MWh	150	142	143	141	149
2004	Change	0.50%	1.50%	2.00%	1.50%	1.30%
	\$/MWh	151	144	146	143	151
2005	Change	0.19%	1.19%	0.39%	0.19%	1.19%
	\$/MWh	151	146	146	143	153
From 1 July 2006	Change	0.00%	0.00%	-2.40%	-1.10%	-0.80%
	\$/MWh	151	146	143	142	152

8 November 2007

Year	Year-on-year changes	Average \$/MWh electricity standing offer prices				
		AGL Networks	CitiPower	Powercor	SP AusNet	United Energy
2006 average	\$/MWh	151	146	145	143	152
2007	Change	1.60%	1.50%	1.50%	0.00%	1.60%
	\$/MWh	153	148	145	142	154

Source: CRA analysis

Table 16: Estimates of average gas standing offer prices by retailer (2003-2007)

Year	Year-on-year changes	Average \$/GJ gas standing offer prices		
		AGL	Origin Energy	TRUenergy (formerly TXU)
2003	Starting Point \$/GJ	9.34	9.10	10.00
2004	Change	5.00%	5.00%	5.00%
	\$/GJ	9.81	9.56	10.50
2005	Change	2.19%	1.69%	1.69%
	\$/GJ	10.02	9.72	10.68
2006	Change	3.55%	3.05%	3.05%
	\$/GJ	10.38	10.01	11.00
2007	Change	3.93%	3.43%	3.43%
	\$/GJ	10.79	10.36	11.38

Source: CRA analysis

5.2. MARKET OFFERS

Retailers use a range of channels to deliver market offers to customers, including retailers' websites, direct mail-outs, telemarketing campaigns, so called "door-knockers" who visit the potential customer's premises, and occasionally other agents, such as real estate agents or letting agencies. Many retailers support all these channels with general media advertising to increase name awareness, support their brand and brand position, and in some cases, promote at least some level of awareness of their offers.

8 November 2007

5.2.1. Types of market offers

Market offers tend to differ from standing offers in the prices at which energy is sold and the terms and conditions of sale.⁴⁶ Appendix B describes the survey of market offers we have undertaken, including the information available on historical market offers. The key elements of a market offer are:

- *The price at which energy is offered:* This includes fixed charges per bill, and variable charges for peak/off-peak energy usage.
- *The terms of the contract:* Some market contracts are cancellable at any time (on reasonable notice/at the next meter read) without penalty. Others are for a fixed term, and the customer incurs an “early termination fee” for ending a contract early. Following an investigation of termination fees in 2006, the ESC required that the fee should only cover the costs that the retailer actually incurs through early termination, and should not have a “penalty” element.⁴⁷ As such, termination fees have essentially become a cost pass-through item and do not affect retail margins. Appendix C reports the survey of termination fees that we have undertaken.
- *The source of energy that is supplied:* This is an issue specific to electricity market offers, and does not apply to gas market offers. Some market offers for the supply of electricity make no claims about the source of the energy that is supplied, while others make claims that the energy being supplied is particularly “green” or that it comes from sustainable sources. Appendix D describes green energy offers.
- *Monetary inducements:* These typically take the form of up-front discounts, or discounts for paying a bill on time or by direct debit. As shown in Appendix B, market offers are available on the websites of virtually all of the retailers serving small electricity and gas customers.
- *Other non-monetary inducements:* These take the form of store vouchers, free electronic goods or magazine subscriptions, frequent flyer points, or the opportunity to enter into competitions or prize draws. IPART, in its derivation of customer acquisition costs (discussed in Section 4.4) has assumed that these other, non-monetary inducements would be covered by the customer acquisition cost allowance. To avoid any double counting of costs, we have adopted the same approach for this study so that no adjustment for the cost of these inducements has been made in the margin calculation.

⁴⁶ There are limitations to the extent to which the terms and conditions of a market offer can differ from the terms and conditions of a standing offer, and these limitations are documented in the Energy Retail Code.

⁴⁷ *Early Termination Fees Compliance Review*, Final Decision, ESC Victoria, December 2006.

5.2.2. Approach for estimating revenues from market contracts

Table 30 in Appendix B describes the market offers we have reviewed in a survey we conducted in August 2007. Although the market offers described there display significant variation, the following key observations can be made:

- Most offers provide a discount that is referenced to the standing offer:
 - Of the 10 retailers whose website provides information regarding electricity market offers, seven offer discounts. In the case of six of these seven, the discounts are explicitly related to the applicable standard offer. Discount levels offered vary, but tend to be in the 3 per cent to 7 per cent range for residential customers. Two retailers offer 10 per cent discounts to business customers.
 - We found five gas market offers, all of which were related to the applicable standard offer. Discounts are typically 3 per cent to 5 per cent, with one retailer offering 10 per cent discount to business customers on a three-year fixed term contract.
- Most retailers offer both a fixed-term and a non-fixed term contract. The non-fixed offers generally include less in the way of discounts or non-monetary incentives. While the fixed term contracts may offer lower prices and/or higher inducements, they also tend to include early termination fees that may discourage customers from switching during the term of the contract.

In the absence of detailed information about the average terms of market contracts, we have therefore assumed that:

- For electricity customers, average revenues from market contracts are 5 per cent less than those from standing offers; and
- For gas customers, average revenues from market contracts are 3 per cent less than those from standing offers.

This discount has been applied across both residential and business customers.

We have not included in our margin calculations additional revenue from termination fees, since we do not know the extent of any revenues that the retailers collect from termination fees, and, as discussed above, since 2006, termination fees have become a pass-through item.

We have documented “green” energy offers in Appendix D, where we show that there is quite a large variation in premiums charged to customers for green energy. We also show in Appendix D that the estimated additional costs of green energy to retailers fall within this range of premiums. However, in the absence of more detailed information, we have not explicitly derived margin estimates for retailers offering green products.

5.3. DUAL FUEL OFFERS

We generally do not see any monetary offers to customers for dual fuel that are not simply the sum of buying both fuels separately. Most of the offers that we researched for this study, and which are shown in Appendix B, are of that form.

It is likely that the impact of a retailer's dual fuel offering would be reflected in a retailer's costs, including acquisition costs, rather than revenues. Thus, a retailer that markets electricity and gas together may be able to sign-up a customer on two fuels on effectively one acquisition cost. If dual-fuel retailers are able to rationalise their billing systems, they may be able to reduce their retailer operating costs further. However, this is particularly difficult to achieve in Victoria, because manual meter reading occurs bi-monthly for gas meters and quarterly for electricity meters, and meter reading dates are not synchronised. Thus retailers separately send out six gas bills a year as the bi-monthly gas meter reads become available, and four electricity bills a year as the quarterly electricity meter reads become available.

In summary, while dual fuel customers may contribute to retailers attaining some additional scale economies, a dual fuel customer would not necessarily contribute significantly more margin than the combination of an electricity customer and a gas customer. We have therefore not distinguished between single fuel and dual fuel customers in this study.

8 November 2007

6. RETAIL MARGINS

This section describes the retail margins we have derived for this study. We first describe the terminology that has been adopted and then set out the estimates and how they have been developed.

6.1. TERMINOLOGY

This terminology in this study follows the conceptual framework employed by the Victorian government and most of the regulators in the other NEM jurisdictions in setting standing retail electricity and gas tariffs.⁴⁸ In the following:

- The *gross margin* of an electricity or gas retailer is defined as a retailer's retail revenues minus energy purchase costs, transmission and distribution charges, fees and levies. That is, the gross margin includes retailer operating costs.
- The *net margin* is defined as a retailer's revenues minus energy purchase costs, transmission and distribution charges, fees and levies, and retailer operating costs. That is, the net margin is what remains after the retailer operating costs are subtracted from the gross margin.

In this study we have referred to the *net margin* as the "retail margin." The net margin is usually presented as a percentage of total revenue, and this is also the approach used in this study.

For clarity, we note that there are alternative approaches for presenting net margins:

- Recent regulatory decisions in South Australia have defined net margin as a percentage of the retailer's "controllable costs", i.e. it is defined as gross margin minus retailer operating costs, divided by wholesale purchase costs plus retailer operating costs;⁴⁹ and
- Some regulators have also considered energy retailers' net margins as a percentage of capital employed.⁵⁰

The following sections summarise our estimated margins for electricity and gas, respectively.

48 The margin concepts used here are therefore quite different from those used in finance and economics.

49 *Electricity Standing Contract Price – Price Determination*, ESCOSA, December 2004.

50 See for example *Promoting retail competition and investment in the NSW electricity industry – Regulated electricity retail tariffs and charges for small customers 2007 to 2010*, Electricity – Final Report and Final Determination, IPART, June 2007.

6.2. NET MARGINS ON ELECTRICITY SALES

Table 17 summarises the results for the range of margins on standing offers and market contracts for electricity customers, across all years 2003-2007 and all Victorian distribution areas. Further disaggregation of the estimated net margins by year and distribution network area is presented in Appendix E.

The estimates shown in Table 17 have been derived by subtracting average costs from average revenues, and dividing by average revenues. Market contract prices are assumed to be at a 5% discount to the standing offer prices.

Table 17: Electricity net margins for standing offers and market contracts, and the market as a whole, under varying wholesale energy cost conditions

Contract type	Range of net margin		
	Low wholesale costs	Medium wholesale costs	High wholesale costs
Standing offer	11% to 22%	7% to 18%	3% to 14%
Market contract	1% to 13%	-3% to 9%	-8% to 4%
In the market as a whole (based on 60% of customers being on market contracts)	5% to 17%	1% to 13%	-4% to 8%

Source: CRA analysis

Note: The low and high wholesale cost conditions in this table correspond to the ends of the ranges for wholesale costs that were shown in Table 5 above. The medium wholesale costs correspond to the mid-point of the range of estimates of wholesale costs shown in Table 5 above.

Examination of the net margins shown in Table 17 above indicates that:

- While the margins available under the electricity standing offer tariffs vary across the years and the five Victorian electricity distribution areas, indicative margins available between 2004 and 2007 appear to have been between 7% and 18%;
- By contrast, the equivalent indicative margins under electricity market contracts, which typically include a 5% discount to the standing offer price, appear to range from -3% to 9%; and
- After weighting these results for the number of customers on electricity standing offers and market contracts, indicative net margins for the market as a whole appear to range from 1% to 13% across the various distribution areas between 2004 and 2007.

6.2.1. Comparison with other margin estimates

The figures in Table 17 above can be compared to benchmarks in other Australian jurisdictions as shown in Table 18 below. Table 18 suggests that Australian regulators believe that a net margin of up to 5 per cent is adequate for an electricity retailer.

8 November 2007

Table 18: Summary of most recent decisions on net margin for Australian electricity retailers

Jurisdiction	Date of decision	Net margin (% of revenue)
NSW	June 2007	5%
Queensland	June 2007	5%
ACT	June 2007	4%
South Australia	December 2004	Approximately 5%. The actual allowance was expressed as 10% of non-controllable costs – i.e. wholesale purchase and retailer operating costs.
South Australia	August 2007 – draft	Approximately 5%. The actual allowance was expressed as 10% of non-controllable costs – i.e. wholesale purchase and retailer operating costs. (Unchanged from the December 2004 decision)
Tasmania	September 2003	3%
Tasmania	July 2007 – draft	3% (Unchanged from the September 2003 decision)

Source: CRA analysis of regulatory decisions

Note: In regard to the retail prices for electricity in Tasmania that are applicable in 2007, the Electricity Supply Industry (Price Control) Regulations 2003 (Price Control Regulations) required the Regulator to set the retail margin at the same percentage, i.e. 3%, as provided for in the 2003 Determination.

6.2.2. Net margins as \$ values

Net margins as \$/customer for various types of customer (residential or commercial) and size of consumption (MWh/year) are shown in Table 19 below. Table 19 shows the net margins from Table 17 above as \$/customer rather than as percentages of the customer bill. As was the case for Table 17, Table 19 also shows the range of margins across all years 2003-2007 and all Victorian electricity distribution areas.

Table 19: Electricity net margins (\$/customer) for standing offers and market contracts, under varying wholesale energy cost conditions, for various customer usage levels

Contract type	Customer consumption	Net margin (\$/customer)		
		Low wholesale costs	Medium wholesale costs	High wholesale costs
Standing offer	6 MWh per annum (residential)	\$96 to \$201	\$60 to \$165	\$24 to \$129
	12 MWh per annum (business)	\$266 to \$476	\$194 to \$404	\$122 to \$332
Market contract	6 MWh per annum (residential)	\$9 to \$112	-\$27 to \$76	-\$63 to \$40
	12 MWh per annum (business)	\$88 to \$294	\$16 to \$222	-\$56 to \$150

Source: CRA analysis

8 November 2007

6.2.3. Sensitivity of margin estimates to higher retailer operating costs

In Section 4.4 above, we concluded that \$75/customer is a reasonable benchmark to use in this study for retailer operating costs excluding customer acquisition costs. We noted that this figure was recently determined by IPART to be an appropriate value for retailer operating costs for a mass market new entrant retailer without access to economies of scope from a shared distribution/retail business. However, we also noted that some benchmarks from other jurisdictions have been higher – for example, \$96 per customer has been allowed in a draft decision in South Australia. We understand from the Commission that the Victorian retailers have presented the view that a similar estimate of that value should be used in this study.

Table 20 below shows the range of margins that would result if a figure of \$96/customer were used for retailer operating costs rather than \$75/customer.

Table 20: Sensitivity analysis of net margins for electricity standing offers and market contracts, under varying wholesale energy cost conditions – based on retailer operating costs of \$96/customer

Contract type	Range of net margin		
	Low wholesale costs	Medium wholesale costs	High wholesale costs
Standing offer	9% to 20%	5% to 16%	1% to 12%
Market contract	-1% to 10%	-6% to 6%	-10% to 2%
In the market as a whole (based on 60% of customers being on market contracts)	3% to 14%	-1% to 10%	-6% to 6%

Source: CRA analysis

6.3. NET MARGINS ON GAS SALES

The results for net margin for gas are summarised in a much narrower range than those for electricity. This is because the analysis currently uses point estimates for delivered gas wholesale costs.

Our results for net margin across all years and distribution businesses are summarised in Table 21 below. The market contract rates are assumed to be at a 3% discount to the standing offer rates.

Table 21: Gas net margins for standing offers and market contracts, and the market as a whole

Contract type	Range of net margin
Standing offer	2% to 5%
Market contract	-4% to -1%

8 November 2007

Contract type	Range of net margin
In the market as a whole (based on 50% of customers being on market contracts)	-1% to 2%

Source: CRA analysis

6.3.1. Net margins as \$ values

Example margins for various customers are shown in the Table 22 below. Again these are across all years and distribution businesses.

Table 22: Gas net margins (\$/customer) for standing offers and market contracts, for various customer usage levels

Contract type	Customer consumption	Net margin (\$/customer)
Standing offer	60 GJ per annum (residential)	\$15 to \$33
	200 GJ per annum (business)	\$225 to \$285
Market contract	60 GJ per annum (residential)	-\$25 to -\$7
	200 GJ per annum (business)	\$127 to \$186

Source: CRA analysis

6.3.2. Sensitivity of margin estimates to higher retailer operating costs

Table 23 below shows the range of margins that would result if a figure of \$96/customer were used for retailer operating costs rather than \$75/customer.

Table 23: Sensitivity analysis of net margins for gas standing offers and market contracts – based on retailer operating costs of \$96/customer

Contract type	Range of net margin
Standing offer	-1% to 2%
Market contract	-8% to -5%
In the market as a whole (based on 50% of customers being on market contracts)	-4% to -1%

Source: CRA analysis

8 November 2007

6.4. SENSITIVITY OF MARGIN ESTIMATES TO THE INCLUSION OF BUSINESS ACQUISITION COSTS

The Commission requested CRA to consider the sensitivity of the margin estimates to business acquisition costs. Translating the cost of a business acquisition into a form in which it can be taken up as part of the business' operating cost and margin (i.e. return of and return on capital employed) can be undertaken. This requires knowledge or assumptions about:

- The period over which the acquisition cost (plus expected return) is to be amortised;
- The net change in the customer base, ideally on an annual basis, but at least on a net basis over the term of the amortisation period; and
- The expected rate of return.

While some or even all of this information might be available with regard to specific acquisitions, it is considerably more difficult to construct a typical business acquisition case that can be used more generically to estimate the impact of business acquisition on the costs and margins of the host retailers in Victoria. For example, the cost per customer acquired has varied by close to a factor of three across the acquisitions that have taken place in Victoria, ranging from something in the vicinity of \$550 per customer (nominal dollars) in Origin Energy's acquisitions of the retail business of Powercor (2001) and CitiPower (2002) to something in the order of \$1,500 per customer in CLP Australia's (now known as TRUenergy) acquisition of the merchant assets of TXU (2005).⁵¹

By contrast, the customer acquisition costs provided to the Commission for this study were materially lower, and showed considerably less variation, ranging from \$150 to \$200. The differences between these costs would suggest that the business acquisition route must offer some significant benefits as compared to green field acquisition.

As an example of the possible impacts of accounting for business acquisition costs in the cost/margins of the local retailers, assume:

- The lower business acquisition cost figure of \$550 per customer;
- An amortisation period of ten years;
- No additional return beyond the net margin and the re-sale value of the asset;
- An original customer base of 500,000; and
- No net reduction in customer numbers.

⁵¹ All dollar figures presented of dollars of the year. The CLP acquisition included gas customers, generation and other merchant assets. The \$/customer figure presented has been adjusted to attempt to remove the value of these assets.

8 November 2007

Under these assumptions, recouping the business acquisition cost (without any return on that cost) would translate into a charge of \$74.50 per customer in each of the ten years of the amortisation period. Assuming that revenue remained as calculated in Section 5, this would reduce the margin on an average customer by \$74.50 per year.

Table 24 below shows the net margins that would result if we were to reduce the margin on an average standing offer customer by \$74.50 per year (as a possible means of assigning business acquisition costs), while retaining the customer acquisition costs for market contract customers in accord with our previous analysis.

Table 24: Net margins – based on reducing the margin of an average standing offer customer by \$74.50 per year

Contract type	Range of net margin		
	Low wholesale costs	Medium wholesale costs	High wholesale costs
Standing offer	3% to 14%	-1% to 10%	-5% to 7%
Market contract	1% to 13%	-3% to 9%	-8% to 4%
In the market as a whole (based on 60% of customers being on market contracts)	2% to 13%	-2% to 9%	-7% to 5%

Source: CRA analysis

6.5. NET MARGINS DERIVED FROM OTHER SOURCES

By way of a cross-check, we have compared the margin estimates presented above with other estimates reported in the public domain.

We first considered published EBITDA (Earnings before Interest, Taxes, Depreciation and Amortisation) estimates. This is a different measure from the net margin estimates calculated in this report, since the net margin implicitly includes some capital cost items, for instance where IT costs are concerned. As such, we would expect EBITDA estimates to be higher than the margin estimates we have derived.

Recent evidence of net margins (EBITDA as a percentage of revenue) for actual Australian electricity retailers includes the following findings from the published reports of AGL and Origin Energy. The figures reported in Table 25 are applicable to these companies' energy retail operations only, and across the jurisdictions in which these retailers operate. Except as noted, they apply to these companies' total retail operations, and not just the mass market.

8 November 2007

Table 25: EBITDA on energy retailing operations as reported by AGL Energy and Origin Energy

Period	AGL Energy	Origin Energy
For the twelve months to June 2007	6.0%	11.4%
For the six months to December 2006	8.0%	8.8%
For the twelve months to June 2006	7.7%	7.8%
For the six months to December 2005	6.7%	8.2%

Note: AGL has since stated that it is revising its earnings outlook, but has not revised its previous years' figures. See 2008 Earnings Guidance Revision, AGL, 15 October 2007.

Sources: AGL Energy, 2007 full year results, 22 August 2007, pp. 12, 43 and 45. These calculations include results for Sun Gas and Powerdirect.

Origin Energy, Final Results Announcement, Full-year ended 30 June 2007, 29 August, p. 41. Note that these results exclude Origin Energy's retail LPG operations.

AGL Energy Prospectus, 21 February 2007, page 63.

Origin Energy, Interim Results Announcements – Half Year Ended December 2006.

Origin Energy, 28 February 2007, presentation slide 30.

AGL, 2006 Full Year financial Results, AGL, 16 August 2006, presentation slide 14.

In addition, AGL's 2007 full-year results also reveal that the net margin for mass market electricity and gas customers in aggregate were 7.7%. The net margin of electricity sales in the mass market was 8.2%; for gas sales it was 7.1%.⁵²

In summary, and although some provisos apply, the EBITDA values that are shown above fall within the net margin ranges that have been estimated in this report. Given the fact that a significant proportion of both of these companies' operations are located in Victoria, this suggests that these values are likely to be indicative of the actual margins earned in the small end of the Victorian electricity gas and electricity retail markets, after adjustment for the fact that (a) the margins in this report are calculated after depreciation, and (b) the EBITDA results include these companies' results in all jurisdictions and all market segments. Taken together, this would suggest that the actual margins earned in the small end of the Victorian electricity and gas retail markets are less likely to be at the high end of the ranges estimated above, and more likely to be in the middle or below the mid-range of those estimates.

⁵² AGL Energy, 2007 full year results, 22 August 2007, pp. 12, 43 and 45. These calculations include results for Sun Gas and Powerdirect.

APPENDIX A: DETAILS OF THE PRICE PATH

A.1 BASIC OPERATION

Each local retailer is obligated to offer to supply electricity or gas as appropriate to prescribed customers in its local area, at standard prices based on this price path, and on standard published terms and conditions. These contracts are called “standing offer contracts”. The standing offers must include standard terms and conditions relating to minimum retail service standard, customer rights and entitlements, market conduct and information privacy obligations. The standing offers must also comply with the requirements under the Energy Retail Code. The local retailers are required to publish their standing offer tariffs in the Victorian Government Gazette. The current electricity and gas standing offer tariffs, which have applied since 1 January 2007, were published in the Victorian Government Gazette in October 2006.

The Government may exercise its reserve power to amend those published tariffs if it considers that the tariffs are unreasonable. In practice, the retailers have met the price path conditions and obtained Government approval for their tariffs before publishing them in the Victorian Government Gazette; this has avoided the need for the Government to exercise its reserve power to amend published tariffs.

A.2 THE DECEMBER 2003 ELECTRICITY AND GAS PRICE PATH DETERMINATIONS

The price path provides for agreed maximum annual movements in average retail prices for electricity and gas, as shown in Table 26 and Table 27 below.⁵³ The customer numbers shown in these tables were the approximate number of customers that were being supplied with energy on standing offer terms and conditions in 2003 when the original price path analysis was being undertaken. The CPI figure used each year is the change in the All Groups index for Melbourne as published by the ABS for the September quarter before the calendar year to which the prices were to apply. Thus, for example, the September 2002 CPI value was 137.8, while the September 2003 figure was 141.8, and hence the CPI increase of 2.90% was used in determining the price path for 2004.

Table 26: Retail price path for electricity (2004-2007)

Retailer	No. of customers	Year				Real change 2004-2007
		2004	2005	2006	2007	
		CPI	2.90%	1.69%	3.05%	3.43%
TXU (now TRUenergy)	540,000	1.50% (CPI-1.4%)	0.19% (CPI-1.5%)	2.55% (CPI-0.5%)	2.93% (CPI-0.5%)	-3.9%

⁵³ In practice, these maximum allowed changes have been the actual implemented changes.

8 November 2007

Retailer	No. of customers	Year				Real change 2004-2007
		2004	2005	2006	2007	
		CPI	2.90%	1.69%	3.05%	3.43%
Origin / Powercor	595,000	2.00% (CPI-0.9%)	0.39% (CPI-1.3%)	2.55% (CPI-0.5%)	2.93% (CPI-0.5%)	-3.2%
Origin / CitiPower	258,000	1.50% (CPI-1.4%)	1.19% (CPI-0.5%)	2.55% (CPI-0.5%)	2.93% (CPI-0.5%)	-2.9%
AGL	255,000	0.50% (CPI-2.4%)	0.19% (CPI-1.5%)	2.15% (CPI-0.9%)	2.53% (CPI-0.9%)	-5.6%
AGL/Pulse	573,000	1.30% (CPI-1.6%)	1.19% (CPI-0.5%)	2.55% (CPI-0.5%)	2.93% (CPI-0.5%)	-3.1%

Source: Victorian Department of Primary Industries website, and CRA addition of CPI as published

Table 27: Retail price path for gas (2004-2007)

Retailer	No. of customers	Year				Real change 2004-2007
		2004	2005	2006	2007	
		CPI	2.90%	1.69%	3.05%	3.43%
TXU (now TRUenergy)	431,000	5.00% (CPI+2.1%)	1.69% (CPI)	3.05% (CPI)	3.43% (CPI)	2.1%
Origin Energy	556,000	5.00% (CPI+2.1%)	1.69% (CPI)	3.05% (CPI)	3.43% (CPI)	2.1%
AGL	531,000	5.00% (CPI+2.1%)	2.19% (CPI+0.5%)	3.55% (CPI+0.5%)	3.93% (CPI+0.5%)	3.6%

Source: Victorian Department of Primary Industries website, and CRA addition of CPI as published

The distribution charges that came into effect in January 2006 through the ESC's Electricity Distribution Price Determination 2006-2010 were significantly lower than had been anticipated when the price path had originally been put in place in 2003. A further issue in January 2006 was that several appeals to this Determination were lodged with the ESC, and these were not settled until several months into 2006. Because of this, the Government and the retailers agreed that the previously planned January 2006 retail price change for electricity should not be implemented, pending the resolution of the appeals. Thus, the standing offer electricity price remained unchanged at that date.

8 November 2007

A.3 REVISED (2006) RETAIL ELECTRICITY PRICE PATH

In the event, the determination of the appeals did not change any elements of the distribution use of system pricing for 2006. Once this became known, the Government and the retailers agreed revised electricity standing offer prices that came into effect from 1 July 2006, and a revision to the retail price path for 2007, taking into account revised electricity wholesale purchase costs and distribution use of system charges. The revision is shown in Table 28 below.

Table 28: Revised retail price path for electricity for 2006 and 2007

Retailer	Date	
	1 July 2006	1 January 2007
TRUenergy	-1.10%	0.00%
Origin Energy	-1.75%	1.50%
AGL	-0.55%	1.60%

Source: Victorian Department of Primary Industries website.

In the original price path, each of the five electricity retail/distributor areas was allocated an individual average price change constraint. However, in the revision in 2006, where a single retailer was the local retailer in more than one area, a single constraint was applied across all those areas. Thus AGL was bound by a single constraint across its two areas, and Origin Energy was bound by a single constraint across its two areas. This enabled some rebalancing of price changes between areas. For example, though Table 28 shows that Origin Energy was required in July 2006 to reduce prices by 1.75% across the CitiPower and Powercor areas, Origin Energy in practice chose to leave its standing offer prices in the CitiPower area unchanged, and instead reduced its standing offer prices in the Powercor area such that the overall weighted average change equated to 1.75%.

Inspection of the tariffs as gazetted shows the following:

- At July 2006:
 - Origin Energy left the CitiPower area tariffs unchanged and reduced each element of the Powercor area tariffs by 2.4%. Presumably this led to a weighted average reduction of the required 1.75%.
 - AGL left the AGL North (AGL Networks) area tariffs unchanged and reduced each element of the AGL South (United Energy) area tariffs by around 0.8%. Again presumably this led to a weighted average reduction of the required 0.55%.

8 November 2007

- At January 2007, both Origin Energy and AGL's tariff elements changed by varying amounts in a wide range, some increasing and some decreasing. In the absence of any other information, we have assumed that the prices in each retailer's two distribution areas changed on average in accord with the revised price path, without further rebalancing between areas.

In conclusion, and on the basis of this inspection of the tariffs as gazetted, Table 29 below shows our best estimate of how the revised electricity price path for 2006 and 2007 was applied by distribution area.

Table 29: Revised retail price path for electricity for 2006 and 2007 by distribution area

Retailer	Date	
	1 July 2006	1 January 2007
TRUenergy	-1.10%	0.00%
Origin Energy / Powercor	-2.40%	1.50%
Origin Energy / CitiPower	0.00%	1.50%
AGL North (AGL Networks)	0.00%	1.60%
AGL South (United Energy)	-0.80%	1.60%

Source: CRA analysis of gazetted tariffs

APPENDIX B: SURVEY OF MARKET OFFERS – AUGUST 2007

B.1 CURRENT MARKET OFFERS

All these offers are available to all prescribed customers irrespective of the region where they are situated, etc.

Table 30 below shows market offers for each of the retailers as at August 2007. Information has been included in the table if it:

- Has been provided to us by the retailer in the context of this study with a statement that the offer is current; or
- Was published on the retailer's website when we reviewed that retailer's website during August 2007.

The offers in Table 30 are not the full set of market offers that are currently available. We know, for example, that in many cases door-knockers offer additional inducements to customers to switch to a market contract with the retailer that they represent. Often this will amount to an additional discount off the first bill. Our experience shows that a typical offer of this kind would be \$50 off the first bill. However, this anecdotal information does not form a complete and consistent set of data across retailers so is not included, as it would not be comparable on a like-for-like basis. In order to maintain consistency, offers that have not been provided to us by the retailers and are not on the retailers' website have not been included in this table.

Table 30 does not contain any information on early termination charges or on green electricity offers. These are provided separately in Appendix C and Appendix D respectively.

8 November 2007

Table 30: Electricity and gas market offers for prescribed customers – as at August 2007

Retailer	Electricity market offer	Gas market offer
AGL	<p>Residential:</p> <p>AGL Freedom has no fixed fee and no termination charge. Rates are initially 5% off the standing offer rates, but may be varied on 10 business days' notice.</p> <p>AGL Advantage is for a three-year fixed term and includes an early termination fee. Rates are initially the same as the standing offer rates, but may be varied on 10 business days' notice. The terms of this offer allow AGL to charge the termination fee if the customer moves premises during the term of the contract and declines a market offer from AGL at the new premises. AGL does not charge an early termination fee on AGL Advantage if the customer terminates due to a price increase above CPI.</p> <p>On all energy plans, AGL offers a \$50 voucher towards gas and electrical services provided by tradesman at AGL Assist, priority customer service at AGL Energy Shops, and priority services with "AGL Assist plus".</p> <p>Business:</p> <p>The business offer is for a two-year fixed term and includes an early termination fee. Rates are initially the same as the standing offer rates, but may be varied on 10 business days' notice.</p>	The current gas market offers are equivalent to the electricity market offers.
Australian Power & Gas	<p>2 offers:</p> <ol style="list-style-type: none"> <li data-bbox="555 1158 1335 1203">1. Simplicity Plus: No fixed term. 5% off rates that are the same as the standing offer rates for pay-on-time. <li data-bbox="555 1241 1346 1313">2. Savings Plus: 3-year fixed term contract. Fixed charges are the same as the standing offer rates. Usage charges are 5% off the standing off rates. Further 3% off these rates for pay on-time. \$25 off the first account. 	The current gas market offers are equivalent to the electricity market offers. However, these offers do not apply when a Greentricity electricity contract is combined with a gas contract. In those cases see the write-up for Greentricity in Appendix D.

8 November 2007

Retailer	Electricity market offer	Gas market offer
Click Energy	<p>ClickQuick and ClickEasy offer a \$50 sign-up rebate for switching on-line to one of these two plans - \$25 off the first bill and \$25 off the bill 12 months later.</p> <p>All Click Energy plans have no-paper email bills.</p> <ol style="list-style-type: none"> 1. ClickQuick: No fixed term. 5% off standing offer rates if bills are delivered by email and paid on time. 2. ClickEasy: No fixed term. 5% off standing offer rates. Smoothed bills with a quarterly statement. 3. ClickBusiness: Same rates as standing offer. 3-year contract. 	Obtained a retail gas licence in Victoria in June 2006, but has not yet started to retail gas.
Country Energy	Offers on the website were not sufficiently explicit to allow description of their specific prices and terms.	Country Energy provided us with no information on its gas market offers, and no gas market offers are available on the Country Energy website
EnergyAustralia	We attempted to obtain market offers from the EnergyAustralia website and were directed to the new Simply Energy website ⁵⁴ . This website had no market offers at the time of completing this report, and we received no information on market offers directly from the retailer.	As for electricity
Jackgreen	All Jackgreen's market offers contain a percentage of GreenPower accredited energy.	Does not hold a retail gas licence
Momentum Energy	<p>No longer serving residential customers</p> <p>Small business: Offers 10% discount for pay on-time</p>	Does not hold a retail gas licence

⁵⁴ International Power bought out the EA-IPR partnership in August 2007. Following this change in ownership, the business that was trading in Victoria as EnergyAustralia is now known as Simply Energy.

8 November 2007

Retailer	Electricity market offer	Gas market offer
Origin Energy	<p>Residential: ChoicePlus offers the same prices as the standing offers, with no lock-in contract. For electricity-only (i.e. not dual-fuel) offers, the website only offers green electricity. It is not possible to use the website to obtain an electricity-only non-green offer.</p> <p>Business: No market offers were available on the website or notified to us.</p>	<p>Note: The Origin Energy website offers market contracts for residential electricity only, or for residential electricity and gas, but not for residential gas only.</p> <p>If the customer takes electricity and gas with Origin Energy, ChoicePlus offers the same prices as the standing offers, with no lock-in contract, and there is a choice of two offers:</p> <ol style="list-style-type: none"> 1. Free magazine subscription for 24 months – this is available when the change of retailer to Origin Energy is processed. 2. One month's free electricity after 12 months. If the customer maintains both electricity and gas with Origin Energy for 12 months, then on the first bill after that 12 month period the customer receives a rebate of one twelfth of the charges for electricity paid over the preceding 12 month period. <p>Business: No market offers were available on the website or notified to us.</p>
Our Neighbourhood Energy	<p>Neighbourhood Energy Community Partner Program: 4% discount for pay on-time is donated to the customer's chosen charity or community group – and is tax-deductible to the customer if the recipient has Deductible Gift Recipient status.</p>	Does not hold a retail gas licence
Powerdirect	<p>Minimum contract length is three years. The rates on offer on the Powerdirect website have not been updated since February 2006, and are the same as the standing offer prices that were available in 2005. The offers also note that Powerdirect can pass on any changes in network and regulated charges.</p> <p>Powerdirect's offers note that they are only available to customers with usage that satisfies Powerdirect's minimum usage threshold criteria.</p>	Does not hold a retail gas licence
Red Energy	<p>Two offers:</p> <ol style="list-style-type: none"> 1. Red Easy Saver: No fixed term contract. 5% off Red Energy's standard rates for pay on-time. 	Obtained a retail gas licence in Victoria in November 2006, but has not yet started to retail gas.

Retailer	Electricity market offer	Gas market offer
	<p>2. Red Fixed Term Saver. 2-year fixed term contract. 7% off Red Energy's standard rates for pay on-time.</p> <p>Red Energy's standard rates are not the same as the local retailer's standing offer rates – they are generally lower than those standing offer rates. Therefore there is a saving off the standing offer rates besides the stated 5% or 7% discounts for pay on-time.</p> <p>For example, the single rate residential standing offer in the CitiPower area is as follows:</p> <ul style="list-style-type: none"> • First 1020 kWh/qtr: 13.794 c/kWh • Balance: 14.652 c/kWh • Supply charge: \$37.598/qtr <p>Red Energy's standard rate for its single rate residential market offer in the CitiPower area is instead:</p> <ul style="list-style-type: none"> • All energy: 13.63 c/kWh • Supply charge: 41.20c/day (which is equivalent to the standing offer per quarter charge). <p>Thus in this case Red Energy's energy charges are discounted about 1.2% on the first 1020 kWh/quarter and 7.0% on the balance of units.</p> <p>In some areas and on some contract types, Red Energy offers different rates for lower than average or average energy use ("Economy" rates) as against higher than average use ("Saver" rates). An example is the Smart tariff in the AGL North (Agility) area, where the Economy rates have a higher per unit energy charge and lower fixed supply charge while the Saver rates have a lower per unit energy charge and a higher fixed supply charge.</p> <p>Red Energy's rates also differ in some cases across the Powercor area, presumably</p>	

Retailer	Electricity market offer	Gas market offer
TRUenergy	<p>to make some allowance for the different loss factors within that area. For example, we found that a residential All-Time Economy market offer was being marketed in Altona at 15.24 c/kWh for all units, as against 15.62 c/kWh in Mildura. By way of comparison the equivalent standing offer rate is 15.268 c/kWh for the first 1000 kWh/quarter and 16.203 c/kWh for the balance. Thus in this case a low usage Red Energy customer in Mildura would be paying more on a market contract with Red Energy than on a standing contract with Origin Energy (at least before application of the pay on-time discount).</p> <p>Red Energy also offers all customers:</p> <ul style="list-style-type: none"> • “Renewable energy at no extra charge”. The source of this energy is from Snowy Hydro – Red Energy’s parent company – it is not GreenPower accredited. Red Energy is not introducing any new renewable energy through this retail offer. • Option of either a quarterly bill or payment by “EvenPay™” – a fixed payment by direct debit on a weekly, fortnightly or monthly basis 	<p>The current gas market offers are equivalent to the electricity market offers.</p>
	<p>Residential:</p> <ol style="list-style-type: none"> 1. TRUenergy Go Easy: No fixed term contract. 3% off standing offer rates for pay on-time. 2. TRUenergy Go for More: 3-year fixed term contract. 3% off standing offer rates, plus a further 3% off for pay on-time. <p>Small business:</p> <ol style="list-style-type: none"> 1. TRUenergy Business Now: 1-year fixed term contract. 3% off standing offer rates for pay on-time. 2. TRUenergy Business Edge: 3-yr fixed term contract. 10% off standing offer rates. 	

Retailer	Electricity market offer	Gas market offer
Victoria Electricity	<p>Victoria Electricity provides a 5% discount for prompt payment on each component of the bill structure of the GD/GR, GD/GR with hot water, and GH/GL tariffs offered by each of the host retailers in each distribution area.</p> <p>Victoria Electricity does advertise on its website a “No Risk Offer”. The No Risk Offer applies to residential customers only and covers any offer provided to a customer by a licensed energy retailer in Victoria for both gas and electricity supply. The offer must be able to be validated by Victoria Electricity for comparison. If Victoria Electricity is unable to provide the customer with an equal or lower overall combined total cost of gas and electricity (inclusive of Victoria Electricity’s discount for prompt payment) and based on Victoria Electricity’s estimation of the customer’s gas and electricity usage, the customer is free to leave Victoria Electricity without paying any penalties or termination fees.</p> <p>Victoria Electricity also offers customers a \$2000 holiday prize draw every month.</p> <p>Victoria Electricity’s website also says that it offers businesses fixed energy rates for up to 48 months. Changes to network distribution charges, taxes, levies and other regulatory charges may, however, be passed through at cost.</p>	<p>Comments in regard to Victoria Electricity’s electricity market offers apply in respect of gas as well.</p>

Source: Retailers’ web sites and retailers’ submissions to this review. Note that the \$ amounts in this table include GST.

8 November 2007

Although the market offers described in Table 30 display significant variation, several observations can be made across them, as follows:

- **The offers are driven by electricity.** While some retailers offer electricity without offering gas, no retailer offers gas without electricity. Most gas offers follow the structure of the electricity offer; and in some cases the gas offers are dependent on an electricity offer being taken up. This is likely a reflection of the difference in the margins in the standing offers for the two energy sources, which make the electricity account more remunerative to the retailer.
- **Most offers provide a discount that is referenced to the standing offer.** Of the 10 retailers whose website provides information regarding their market offers, seven offer discounts. In the case of six of these seven, the discounts are explicitly related to the applicable standard offer. Discount levels offered vary, but tend to be in the 3% to 7% range for residential customers. Two retailers offer 10% discounts to business customers.
- **Discounts for on-time payment have become the norm.** Having been first offered by Red Energy when the retailer launched in Victoria in July 2004, discounts for on-time payment are now offered by the majority of the retailers. Six retailers offer these discounts, representing the vast majority of the 7 retailers that offer any form of discount, and a healthy majority of the 10 retailers for whom sufficient information was available to determine whether discounts were offered.
- **Innovation in price levels and structure has been minimal.** Only three retailers have departed to any significant degree from the standing offer with regard to the price levels or price structure included in their market offers. By contrast, most market offers explicitly reference the price and structure of the applicable standing offer.⁵⁵ The standing offer has provided a market benchmark for both retailers and customers – making it easier for retailers to make the savings they are offering very clear and easy for customers to understand and believe. Discounts and/or cash rebates and sometimes additional offers (including magazine subscriptions, discount vouchers for other goods and services, free goods, or chances to win a prize draw) are then used to convince the customer they will be better off taking the market offer.

55

Some are linked to the standing offer for an initial period only, and then may diverge. With such a market offer, it is possible that a customer that switches from a standing offer to a market offer will after a period of time find themselves paying more for their electricity or gas than they would be paying had they remained on the standing offer. We are aware of AGL contracts of this form; there may also be others.

This may have made explaining and “selling” the market offers easier, but it is also the case that retail electricity and gas offers in the small end of the market have not become nearly as differentiated and sophisticated as they have in other consumer services markets, such as mobile phones and banking. As a result, it is not at all clear whether the advantages posed by the presence of the benchmark standing offer (customer protection and the provision of an offer against which market offers can be readily compared) outweighs the disadvantages posed by potential difficulties faced by retailers in diverging from the standing offer.

- **Most retailers offer both a fixed-term and a non-fixed term contract.** The non-fixed offers generally include less in the way of discounts or non-monetary incentives. While the fixed term contracts tend to offer lower prices and/or higher inducements, they also tend to include early termination fees that explicitly seek to create barriers to customers leaving during the contract term.
- **Offers targeted at the residential sector offer more variety and features than those targeted to small businesses.** Excluding green electricity offers that are discussed below, most retailers offer several arrangements to the residential sector while very few offer more than one arrangement to business customers.
- **There is increasing attention among the retailers in preserving their ability to recoup non-controllable costs.** Victoria Energy reserves the right to pass through to its market contract business customers any changes, at cost, in network charges, taxes, levies and other charges. AGL Energy reserves the right to vary the market prices they offer to both residential and business customers at any time on 10 business days notice. This trend probably reflects both retailers’ experience in multi-year standing offer arrangements, such as the Victoria price path, and the increased volatility of both network charges and wholesale market prices over the course of the past year or two.

B.2 HISTORICAL MARKET OFFERS

Previous offers that we have seen include the following:

- Different levels of discount off standing offer prices – up to around 9%;
- Frequent flyer or credit card award program points for sign-up (typically 5,000 or 10,000), and additional points per \$ spend;
- Free shopping vouchers – for Coles Myer stores or similar stores (typically \$50 value), or in some cases, the provision of voucher books in which discount offers are available from a relatively large number of businesses;
- Discounts off the first bill, or a series of discounts off each bill during a fixed term – typically the up-front discount is \$50; the total value of a series of discounts can be up to \$100 or \$150;
- Free energy efficient light bulbs;

8 November 2007

- Free energy-efficient showerhead;
- Free football club membership;
- Donations to charities, community programs or sporting clubs;
- Referral programs, under which existing customers who refer new customers to the retailer are given an incentive (referral) payment. Some retailers have also provided incentive payments to a variety of organisations to refer their members to the retailer; and
- Free prize draw or competition entries – some prizes have been worth up to several thousand dollars, such as cars and holidays.

From time-to-time these offers may be offered in combination with each other. Because we have not kept a full historic record of offers, and because retailers did not provide us with a full set of their historic offers, the above list of previous offers is not fully comprehensive.

8 November 2007

APPENDIX C: SURVEY OF RETAILER TERMINATION FEES (2007)

Table 31: Early termination fees

Retailer	Electricity market offer	Gas market offer
AGL	Residential: AGL Freedom has no early termination charge. AGL Advantage has a \$75 early termination charge. Business: \$110 early termination charge.	As for electricity
Australian Power & Gas	Simplicity Plus: None Savings Plus: 3-year fixed term contract. Early termination fees: \$60 in the first year; \$50 in the second year; \$40 in the third year.	As for electricity
Click Energy	ClickQuick: None ClickEasy: None ClickBusiness: 3-year contract. Exit fee \$110 maximum.	-
Country Energy	All the Country Energy offers advertised on the website are for a 2-year contract with an early termination fee of \$90	Country Energy provided us with no information on its gas market offers, and no gas market offers are available on the Country Energy website
EnergyAustralia	No information is available	No information is available
Jackgreen	None	-
Momentum Energy	None	-
Origin Energy	Residential: None Business: No information is available	As for electricity
Our Neighbourhood Energy	No information is available	-
Powerdirect	Three-year contract. Early termination fee is \$48 for residential customers and \$99 for business customers	-
Red Energy	Red Easy Saver: None Red Fixed Term Saver: 2-year fixed term contract. Early termination fees: \$95 in the first year; \$45 in the second year.	-

8 November 2007

Retailer	Electricity market offer	Gas market offer
TRUenergy	TRUenergy Go Easy: None	TRUenergy Go Easy: None
	TRUenergy Go for More: 3-year fixed term contract. Early termination fees: \$90 in the first year; \$70 in the second year; \$50 in the third year.	TRUenergy Go for More: 3-year fixed term contract. Early termination fees: \$90 in the first year; \$70 in the second year; \$50 in the third year.
	TRUenergy Business Now: 1-year fixed term contract. \$150 early termination fee.	
	TRUenergy Business Edge: 3-year fixed term contract. Early termination fees: \$150 in the first year; \$100 in the second year; \$50 in the third year.	
Victoria Electricity	If the customer wishes to transfer to another energy retailer during the term of their No Risk Offer after Victoria Electricity has offered to match or better the offer as outlined above or the customer does not request Victoria Electricity to match or better the offer made to the customer then a \$20 termination fee will apply per fuel, plus the value of any other specified incentive (pro-rata over the contract period).	As for electricity

Source: Retailers' web sites and retailers' submissions to this review. Note that the \$ amounts in this table include GST.

APPENDIX D: GREEN ENERGY

D.1 WHAT IS GREEN ENERGY

Some market offers for the supply of electricity make no claims about the source of the energy that is supplied, while others make claims that the energy being supplied is particularly “green” or that it comes from sustainable sources. Some “green electricity” is accredited; other “green electricity” is not accredited.

The key accreditation agency that is being quoted by retailers is GreenPower – a joint initiative of ACT, NSW, SA, QLD, VIC and WA government agencies to guarantee that the renewable electricity bought from energy suppliers meets stringent environmental standards.

To support the growth of the renewable energy industry in Australia the NSW Government developed the GreenPower Accreditation Program in April 1997. The purpose of the program is to promote the installation of new GreenPower electricity generators by increasing consumer demand and confidence in accredited GreenPower products.

The program was expanded nationally through joint collaboration by participating state government agencies in NSW, Victoria, Queensland, South Australia, the ACT, and Western Australia, and renamed the “National GreenPower Accreditation Program”. In May 2000, the National GreenPower Accreditation Steering Group was officially established. The NSW Department of Water and Energy (DWE) is currently appointed as the GreenPower Program Manager.

The term ‘GreenPower Product’ refers only to the GreenPower accredited portion of any product offered by a GreenPower provider. Most energy retailers throughout Australia offer at least one accredited GreenPower Product. In the contestable (deregulated) markets of NSW, VIC, SA, the ACT and QLD, all residential and commercial customers can choose to buy a GreenPower Product offered by any retailer licensed in that State. Larger customers in WA can also choose GreenPower from licensed retailers outside their franchise area.

The GreenPower products offered by Victorian retailers that have been analysed in this study specify how much GreenPower the customer is purchasing, as a percentage of the customer’s total electricity consumption. That percentage tends to range from 10% to 100%, and for any given retailer’s market offers the cost to the customer increases as the percentage increase. Blended GreenPower products apply when a customer purchases a level of GreenPower equivalent to less than 100% of their electricity consumption. The ‘backfill’ or non-accredited portion of blended products is not reported on and can therefore be sourced from any type of electricity generation. The GreenPower accredited portion of a blended product must be equivalent to at least 10% of a customer’s total electricity consumption.

8 November 2007

The National GreenPower Accreditation Program sets stringent rules for all GreenPower providers offering an accredited GreenPower Product. Two key requirements are for GreenPower providers to: source all generation included in a GreenPower product from GreenPower-approved sources; and purchase at least eighty per cent of GreenPower sales from 'new' renewable energy generation. 'New' is defined as any generator built or commissioned after 1 January 1997 that is GreenPower approved.

From 1 July 2006 onwards, GreenPower providers are required to source 100% of accredited GreenPower sales from 'new' GreenPower generation. For long term GreenPower sales contracts signed prior to 1 July 2006, the 100% 'new' GreenPower requirement must be implemented as contracts are renegotiated or by 31 December 2008, whichever is earlier.

Further information on the rules of the program is available in the National GreenPower Accreditation Document, available on the website at www.greenpower.gov.au.

To ensure that GreenPower sales are additional to legislated renewable energy purchases through the Mandatory Renewable Energy Target (MRET), retailers are required to transfer eligible RECs for each MWh of generation classified as 'new' GreenPower generation sold as part of a GreenPower Product within a settlement period.

In its quarterly report for April to June 2007, GreenPower has reported the following statistics for GreenPower accredited electricity supply in Victoria:

- Residential customers purchasing GreenPower accredited products: 228,389;
- Commercial customers purchasing GreenPower accredited products: 7,363;
- Total customers purchasing GreenPower accredited products: 235,752 (a net increase of 36,026 customers over the quarter);
- GreenPower sales to residential customers: 43,640 MWh;
- GreenPower sales to commercial customers: 48,279 MWh;
- Total GreenPower sales: 91,918 MWh.

Nearly one thousand Australians per day are making the switch to GreenPower. Nationally, there are more than 590,000 customers subscribing to GreenPower, an increase of more than 90,000 customers in 3 months; and GreenPower sales for the quarter were 286,143 MWh, totalling 522,909 MWh nationally for the first half of 2007⁵⁶

56

GreenPower news bulletin issue 22, August 2007

8 November 2007

D.2 RANGE OF GREEN OFFERS

The information on green energy offers contained in Table 32 below was sourced from retailers' websites and information supplied to us from retailers. We note that the most recent GreenPower Quarterly Report also provides information on the GreenPower accredited contents of the various offers of each electricity retailer across Australia, but it does not include any information on the prices at which the retailers actually sell GreenPower to consumers.⁵⁷

Table 32: Green energy offers

Retailer	Green electricity market offer
AGL	<p>AGL's green offers all feature 100% renewable energy; of which 10%, 20% or 100% is from GreenPower accredited sources.</p> <ol style="list-style-type: none"> 1. Green Spirit – 10% – costs extra 99c per week 2. Green Living – 20% – also costs extra 99c per week 3. Green Energy – 100% – costs extra 5.5c/kWh. AGL may, with prior notice, vary the AGL Green Energy premium to reflect changes in the CPI or market prices for electricity generated from renewable resources. The customer can terminate their AGL Green Energy component at any time without penalty. Please note: If the customer's electricity retailer is AGL Sales Pty Limited (Melbourne's south eastern suburbs and the Mornington Peninsula), the AGL Green Energy premium will only be applied to the peak electricity consumption.
Australian Power & Gas	<p>Greentricity offers, with 10%, 50% or 100% of the electricity generated from GreenPower accredited sources. For all Greentricity offers, the standing offer rates apply with no discount. The following additional pricing terms apply to Greentricity:</p> <ol style="list-style-type: none"> 1. Greentricity 10%: No fixed term. \$1 premium/week for electricity only contract; \$0 premium per week for electricity and gas contract. 2. Greentricity 50%: 3-year fixed term. Early termination fee \$30. \$3 premium/week for electricity only contract; \$1.50 premium per week for electricity and gas contract. 3. Greentricity 100%: 3-year fixed term. Early termination fee \$30. \$6 premium/week for electricity only contract; \$3 premium per week for electricity and gas contract.
Click Energy	<p>ClickNatural: Same rates as standing offer. 2-year contract. 25% GreenPower accredited. Exit fee maximum \$55. \$5.50 administration charge for non-electronic transactions.</p>

⁵⁷

National GreenPower Accreditation Program Quarterly Status Report, 1 April to 30 June 2007.

8 November 2007

Retailer	Green electricity market offer
Country Energy	<p>All of Country Energy's green products are 100% renewable energy, but the amount of that which is GreenPower accredited varies between products.</p> <p>Country Energy offers residential customers a choice of:</p> <ol style="list-style-type: none"> 1. countrygreen® energy – residential: 10% GreenPower accredited. \$1.50 premium/week. 2. livingGREEN – 50% GreenPower accredited. \$3.30 premium/week. 3. foreverGREEN – 100% GreenPower accredited. \$4.40 premium/week. <p>Small business customers have a single green option: countrygreen® energy – business, which is 10% GreenPower accredited. Additional cost is 1.1c/kWh.</p>
EnergyAustralia	<p>We attempted to obtain market offers from the EnergyAustralia website and were directed to the new Simply Energy website⁵⁸. This website had no market offers at the time of completing this report, and we received no information on market offers directly from the retailer.</p>
Jackgreen	<p>GreenPower accredited for all products – 10%, 25%, or 100% options. No fixed term. Rates are the same as the standing offer rates. 5% pay on-time discount.</p> <p>Premiums for green:</p> <ol style="list-style-type: none"> 1. 10%: This is Jackgreen's minimum green standard offer. 2. 25%: \$1.10 premium per week. 3. 100%: \$2 premium per week if sign up on-line; otherwise \$4.40 premium per week.
Momentum Energy	<p>No longer serving residential customers</p> <p>Small business: The Eco-Advantage Plan ranges from 1% to 100% GreenPower accredited. No prices are available.</p>
Origin Energy	<p>Three choices; all GreenPower accredited:</p> <ol style="list-style-type: none"> 1. GreenEarth: 20% GreenPower - \$1 extra per week 2. GreenEarth Wind: 100% GreenPower sourced from new wind energy – extra 5.5c/kWh 3. GreenEarth Solar: 100% GreenPower sourced from solar power – extra 6.13c/kWh

⁵⁸ International Power bought out the EA-IPR partnership in August 2007. Following this change in ownership, the business that was trading in Victoria as EnergyAustralia is now known as Simply Energy.

8 November 2007

Retailer	Green electricity market offer
Our Neighbourhood Energy	<p>Greenswitch Neighbourhood is Neighbourhood Energy's 100% Accredited GreenPower product and is supplied from the following sources:</p> <ul style="list-style-type: none"> • 40% Wind turbine sites • 30% Landfill Methane • 20% Mini-Hydro • 10% Solar <p>According to the Our Neighbourhood Energy website, the average family will pay approximately 80 cents a day for GreenSwitch Neighbourhood, on top of their regular electricity tariff.</p>
Powerdirect	There are no green energy offers on the Powerdirect website, and the retailer did not inform us of any green energy offers.
Red Energy	Red energy offers all customers "Renewable energy at no extra charge". The source of this energy is from Snowy Hydro – Red Energy's parent company – it is not GreenPower accredited. Red Energy is not introducing any new renewable energy through this retail offer. The details of Red Energy's offer are included in Appendix B.
TRUenergy	<p>Residential: TRUenergy Go Green: 2-year fixed term contract. 3% off standing offer rates for pay on-time. Early termination fees: \$90 in the first year; \$70 in the second year. 100% renewable energy, of which 10% is GreenPower accredited renewable energy.</p> <p>Go for More and Go Easy also come with TRUenergy Green options, all with 100% renewable energy:</p> <ol style="list-style-type: none"> 1. TRUenergy Planet Starter -10% GreenPower accredited – premium 0.715c/kWh 2. TRUenergy Planet – 20% GreenPower accredited – premium 1.43c/kWh 3. TRUenergy Planet Plus – 50% GreenPower accredited – premium 2.86c/kWh 4. Wind Power – 100% GreenPower accredited – premium 5.775c/kWh <p>Small business GreenPower accredited:</p> <ol style="list-style-type: none"> 1. 2.5% - premium 0.055 cents/kWh 2. 5% - premium 0.11 cents/kWh 3. 10% - premium 0.22 cents/kWh 4. 25% - premium 0.55 cents/kWh 5. 50% - premium 1.1 cents/kWh 6. 75% - premium 1.65 cents/kWh 7. 100% - premium 2.2 cents/kWh 8. Wind Power – premium 5.775 cents/kWh

8 November 2007

Retailer	Green electricity market offer
Victoria Electricity	<p>Victoria Electricity offers EcoGreen (10% accredited) or Premium Green (100% accredited).</p> <p>The EcoGreen product is priced at exactly the same level as the standing offer of each host retailer in each distribution area for tariffs GD/GR with and without hot water, and GH/GI. Essentially, Victoria Electricity is offering a 10% green product at the same price as the standing offer.</p> <p>The Premium Green product is offered at additional cost to the standing offer. The service charge under Premium Green is the same as that as in the standing offer for each retailer in each distribution area for tariffs GD/GR with and without hot water, and GH/GL. However, the unit kWh in each of the tariffs (or parts of each tariff) are charged at a 4¢ per kWh premium to the corresponding standing offer.</p>

Source: Retailers' web sites and retailers' submissions to this review. Note that the \$ amounts in this table include GST.

D.3 COSTS TO CONSUMERS OF GREEN ENERGY OFFERS

Based on the information collated in Table 32 above, CRA has collated in Table 33 below the range of additional costs to consumers (in both c/kWh and \$/week)⁵⁹ of the various GreenPower accredited offers, based on the % of GreenPower accredited energy that is included in each offer. We have not included Red Energy in this collation, as its green energy is not GreenPower accredited.

Table 33: Range of costs to consumers of GreenPower accredited electricity

GreenPower percentage	Range of additional costs to consumers	
	c/kWh	\$/week
Up to 10%	0 – 1.25 c/kWh	\$0 – \$1.50
20-25%	0.55 – 1.43 c/kWh	\$0.67 – \$1.72
50-75%	1.10 – 2.86 c/kWh	\$1.32 – \$3.43
100%	1.67 – 6.13 c/kWh	\$2.00 – \$7.36

Source: CRA analysis of retailers' websites

We note that these results are consistent with the findings of a report by Choice magazine, published in May 2007, which found that:⁶⁰

- There are massive price differences for Accredited GreenPower products between both retailers and products.

⁵⁹ We assume an average usage of 120 kWh/week

⁶⁰ *Price Comparison: GreenPower*, Choice Magazine, May 2007

8 November 2007

- GreenPower is now available to all Australian households.
- GreenPower generally costs more than standard electricity, but what you'll pay depends on the percentage of accredited GreenPower and the retailer you choose.
- The average household could pay over \$400 a year extra for 100% GreenPower – roughly an additional 20% to 40% above government-regulated standard electricity rates – but choosing a cheaper retailer would cut that bill by half or even more (depending on your electricity consumption, where you live and which retailers are available).
- Buying less than 100% GreenPower does less to help the environment but is obviously cheaper – under \$100 a year for most people. Several companies offer 10% accredited GreenPower at no extra cost above regulated electricity rates.

D.4 COSTS TO RETAILERS OF GREEN OFFERS

While green offers entail additional product development, marketing, administration and compliance costs, we suggest that the main significant additional cost to retailers of GreenPower accredited offers is the cost of the Renewable Energy Certificates (RECs) to support the GreenPower accreditation. Analysis of AFMA data shows that the cost of RECs for 2007 has varied between \$14 and \$49 per MWh, averaging around \$35/MWh, or 3.5c/kWh. This is within the range of the premiums charged to consumers for GreenPower accredited power as shown in Table 33 above.

The fact that retailers are actively marketing green energy offers attests to there being a margin available on the offers and a market for the offers.

8 November 2007

APPENDIX E: ESTIMATED ELECTRICITY NET MARGINS BY YEAR AND DISTRIBUTION NETWORK AREA

Table 34 and Source: CRA analysis

Table 35 on the following page present estimates of the retail electricity net margin available in each year from 2004 through 2007 in each distribution network area, for the standing offer applicable in that area at that time, and for market contracts. The market contracts in all cases have been assumed to include a 5% discount to the standing offer. Estimates are provided for the high, low and midpoint wholesale electricity costs estimated in Table 5.

8 November 2007

Table 34: Estimated electricity standing offer net margins by year and distribution network area

Year	Low wholesale energy costs					Medium wholesale energy costs					High wholesale energy costs				
	AGL Networks	Citi Power	Power cor	SP AusNet	United Energy	AGL Networks	Citi Power	Power cor	SP AusNet	United Energy	AGL Networks	Citi Power	Power cor	SP AusNet	United Energy
2004	17%	15%	13%	13%	14%	13%	11%	8%	8%	10%	8%	6%	4%	4%	5%
2005	17%	15%	11%	15%	15%	13%	11%	7%	11%	11%	9%	7%	3%	7%	7%
2006	19%	20%	17%	19%	21%	15%	16%	13%	14%	17%	11%	12%	9%	10%	13%
2007	19%	21%	17%	13%	22%	15%	17%	13%	9%	18%	11%	13%	9%	5%	14%

Source: CRA analysis

Table 35: Estimated electricity market contract net margins by year and distribution network area

Year	Low wholesale energy costs					Medium wholesale energy costs					High wholesale energy costs				
	AGL Networks	Citi Power	Power cor	SP AusNet	United Energy	AGL Networks	Citi Power	Power cor	SP AusNet	United Energy	AGL Networks	Citi Power	Power cor	SP AusNet	United Energy
2004	7%	5%	3%	2%	4%	3%	1%	-2%	-2%	-1%	-2%	-4%	-7%	-7%	-5%
2005	7%	5%	1%	5%	5%	3%	1%	-2%	0%	1%	-2%	-4%	-8%	-4%	-3%
2006	9%	11%	7%	9%	12%	5%	6%	3%	4%	7%	1%	2%	-2%	0%	3%
2007	9%	11%	7%	3%	13%	5%	7%	3%	-1%	9%	1%	3%	-1%	-6%	4%

Source: CRA analysis

8 November 2007

APPENDIX F: ESTIMATED GAS NET MARGINS BY YEAR AND RETAIL AREA

Table 36 and Table 37 below present estimates of the retail gas net margin available in each year from 2004 through 2007 for each retail area, for the standing offer applicable in that area at that time, and for market contracts. The market contracts in all cases have been assumed to include a 3% discount to the standing offer.

Table 36: Estimated gas standing offer net margins by year and retail area

Year	AGL	Origin Energy	TRUenergy (formerly TXU)
2004	5%	4%	5%
2005	4%	4%	5%
2006	4%	3%	4%
2007	3%	2%	4%

Source: CRA analysis

Table 37: Estimated gas market contract net margins by year and retail area

Year	AGL	Origin Energy	TRUenergy (formerly TXU)
2004	-2%	-3%	-1%
2005	-3%	-4%	-2%
2006	-3%	-4%	-3%
2007	-3%	-4%	-3%

Source: CRA analysis