A critique of the Victorian retail electricity market

A report for the Brotherhood of St Laurence

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Executive summary

This document is a report to the Brotherhood of St Laurence. We have been commissioned to critique the Victorian retail electricity market in its provision of electricity to households.

Retailers consider that the Victorian electricity market is fiercely competitive. The Australian Energy Markets Commission (AEMC) agrees with this and says that competition is effective. The Australian Energy Regulator does not comment on the market. The Essential Services Commission of Victoria (ESC) has expressed concerns about retail costs and margins and is seeking to encourage debate about this.

Energy consumer advocates are highly critical of the Victorian retail market. Consumer surveys commissioned by the ESC and AEMC are also not encouraging. The ESC's survey finds consumer dissatisfaction with many aspects of the retail market. The AEMC's survey finds Victorian consumers are less satisfied that those elsewhere in the National Electricity Market (NEM).

Our quantitative analysis focuses on retail charges, starting with data on household electricity charges and prices supplied by the Australian Bureau of Statistics. We find that retailer charges (in respect of the costs that retailers control) have increased since the market was fully deregulated. Our calculation of retailer charges is broadly consistent with (if not towards the lower end) of the range estimated by others. We also find that the fixed charges in retail tariffs are, relative to the fixed network charges, far higher in Victoria than elsewhere in the NEM. This means that the average prices paid by low consumption (typically low income) households in Victoria are far higher than for higher consumption (typically higher income) households.

The evidence on the effectiveness of competition seems to be contradictory. Retailers say the market is highly competitive and it is true that switching rates in Victoria are high by Australian and international standards. Also there do not seem to be significant barriers to retailer entry or customer switching.

Why then are retail charges, on average, so high and why is there apparently so little evidence of product and service innovation? New entrant retailers have been able to build market share, but have typically been acquired by one of the major retailers once they have reached critical mass. The characterisation of the retail market, by the Chief Executive of a retailer that was acquired by one of the major incumbent generators, as an oligopoly selling a commodity product seems to be a reasonable characterisation of the current state of a market that has been open to competition for 13 years. If this characterisation is correct, then households seem to be paying retailers a lot but only getting a little in return. If there is indeed fierce competition, consumers don't seem to be the beneficiaries of it.

Markets are complex. More needs to be done to properly understand what is really going on. In addition to strategic analysis, quantitative work to understand retailer margins and return on investment, and cost structures would be very valuable. Consistent definitions and approaches will allow international and national

comparison. In this regard the quantitative analysis of retail markets being undertaken by the Competition and Markets Authority in Great Britain might form part of an analytical template.

We also suggest analysis of possible interventions including the regulation of fixed charges. Is it possible to find interventions that improve the market for all consumers and not just for some at the expense of others?

1 Introduction

This document is a report to the Brotherhood of St Laurence. The Brotherhood of St Laurence is a non-government, community-based organisation concerned with social justice.

We have been commissioned to critique the Victorian retail electricity market specifically as it relates to the provision of electricity to households. This report does not focus specifically on any particular segment of the residential electricity market. However the concerns raised in this report – apparently unhappy consumers, high retail costs and very high fixed elements of retail tariffs - affect the lower income households and individuals whose interests the Brotherhood of St Laurence promotes, most adversely. This means that low-income households and individuals have a particular interest in the issues that are the focus of this report.

There are two main sections to this report. The first section summarises others' views of the Victorian retail market. It then analyses those views and provides our own quantitative and strategic assessment. The second section describes possible actions that regulators and the Government might consider.

It is intended that this report is a constructive contribution to the contemporary debate about the Victorian retail market, in the context of widespread concern about the market.

2 Evidence and views

This section summarises what regulators, consumer advocates and the industry have said about the retail electricity market in Victoria. We then present our own analysis and finally conclude.

2.1 Background to the Victorian retail electricity market

The Victorian retail electricity market is a market of around 2.3 million connections about 98% of whom are classified as small consumers – typically households and small businesses.

Victoria is one of five states served by the National Electricity Market (NEM). This involves a mandatory market for the provision of electricity by large scale generators. A single transmission network service provider and then five distribution network service providers convey the electricity from these large scale generators to end users. Many end users also produce electricity through distributed generation to meet part of their own needs and at times export production surpluses to the grid.

The retailing of electricity – which is the businesses of selling electricity to end users – is contestable and has been since 2002. From 2002 to 2008 the Essential Services Commission of Victoria (ESC) set the terms of some tariffs (known as reference tariffs or standing tariffs) which were intended to be fall-back tariffs for consumers who chose not accept tariffs offered in the market (known as market offers). Since 2009 the ESC does not regulate any retail tariffs. However some retailers are obliged to still offer reference/standing tariffs but they are free to set the terms of these tariffs.

Retail tariffs in the other four states covered by the NEM are becoming deregulated, embarking on the path that the Victorian retail electricity market has been on since 2009.

2.2 Regulators

Three regulatory commissions are involved in oversight of the Victorian electricity retail market in various ways.

Australian Competition and Consumer Commission (ACCC)

The ACCC enforces compliance with Australian Consumer Law which covers activities such as door to door sales and deceptive conduct. The ACCC has not commented on the competitiveness of the Victorian retail market but has issued fines to various retailers operating in Victoria for false, misleading and deceptive conduct.

Essential Services Commission of Victoria (ESC)

The ESC is responsible for regulating energy retailing in Victoria. All energy retailers are required to hold a licence granted by the Commission. Energy licences place a range of obligations on energy companies, including compliance with the Energy Retail

Code (ERC). The Commission has recently harmonised the ERC with the National Energy Consumer Framework (NECF) administered by the Australian Energy Regulator (AER), to enable national energy retailers to achieve regulatory efficiencies, whilst retaining a number of consumer protections that are unique to Victoria. However, these protections do not extend to the regulation of energy prices.

Since 2009 the ESC has not regulated retail tariffs in Victoria. The ESC may regulate retail tariffs but only if a review by the Australian Energy Markets Commission (AEMC) finds retail competition to be ineffective and recommends that price controls be reintroduced. The ESC has produced studies of the Victorian electricity retail market in 2002, 2004 and 2013.

The ESC's first (2002) study was completed shortly after the retail market was opened to competition. It noted that little could be said about the competitiveness of that market at such an early stage. However, it said that its price caps discouraged participation by suppressing margins and creating uncertainty about future levels of those caps. The net churn rate at the time of the review was 4%, and although there was evidence of innovation, the ESC expressed concern about the complexity of retailers' offers and the ability to compare market offers across retailers.

The ESC's 2004 study pointed to seven new retailer entrants in the previous two years that had attracted 50,000 customers, that 13% of customers had switched retailer and that 17% of customers had chosen market rather than regulated contracts. It concluded that the market had been less than fully effective for the smaller retail customers.

The ESC's 2013 review included a research paper and a quantitative paper on retailer margins. The research paper suggested that Victorian retail electricity market could no longer be classified as highly concentrated (the market share of new entrants in 2012 was close to 30%). It calculated customer churn rates in 2011 and 2012 of 17% (about 40% below those reported by the AER, AEMC and the Energy Retailers Association which include new dwellings and customers moving between dwellings as churn).

The quantitative paper commented on the findings of the ESC's consultant's reports on electricity prices and retailer margins in Victoria from 2006 to 2012. The consultant's report focused on gross margins (i.e. the retail charge as a percentage of non-retail charges) and net margin. This was calculated for various tariffs and in each of five areas defined by the boundaries of the distribution network service providers. The report found that gross and net retail margin had been increasing since regulated reference tariffs had been withdrawn. It also found higher margins for customers that were still supplied on reference tariffs. It speculated that such customers were more "sticky" and that this might reflect complacency or a more fundamental inability to interact with a competitive market.

The ESC suggested that its reports were not intended to definitively answer questions about the progress of retail competition, but rather to shed light on the reason for price rises in Victoria which would inform discussions about the effectiveness and extent of competition in the Victorian retail electricity market.

In 2013 the ESC commissioned market research to understand aspects of the Victorian retail market[1]. This report found that Victorians rate the electricity offers they are presented with very poorly, and generally lower than they have in the past. It found that older people and lower income households are less likely to switch retailer than younger people and higher income households. It found that price was by far the biggest reason for switching retailer and that those who remain on standing offers do so because they see no benefit in changing.

Australian Energy and Markets Commission

The AEMC reviewed the Victorian retail market in 2008, as a precursor to the withdrawal of regulated reference prices. It concluded that the Victorian retail electricity market was workably competitive. It concluded in particular that there were low barriers to entry, that Victoria had one of the highest switching rates in the world and that although half of all residential customers had by then not switched off regulated tariffs it could not be assumed that such non-switchers were not getting the benefits from competition.

The AEMC periodically produces information relevant to the assessment of retail costs, as part of its annual small consumer price reports. Its 2011 report[2] said that retailers' charges per kWh sold to households in 2013/14 in Victoria (based on regulated reference tariffs) were expected to be between 2.2 and 3.4 times higher than those in New South Wales, Queensland and South Australia.

Its 2013 report[3] did not express retail charges in the same way but instead stated the retail charges per kWh, giving a wide range in each state: 0 to 3 cents/kWh in South Australia, between 1.7 and 2.6 cents/kWh in Queensland and New South Wales. Again Victoria led the pack by a wide margin (between 3.3 and 7.6 cents per kWh).

In August 2014 the AEMC completed its first annual retail competition review in the National Electricity Market[4]. It concluded that "*a range of competitive market indicators suggest the Victorian market has the right conditions in place to promote rivalry between retailers and we have not found a systemic issue on the retailer-side of the market that suggests competition is not working*". In relation to its finding from previous work that retail margins in Victoria were higher than elsewhere in the National Electricity Market, the AEMC suggested that "*Competition is a process and retailer margins can be expected to fluctuate over time. Estimates of retailer margins should therefore be interpreted with caution*."

[1] "Victorian's experience of the electricity market", 2013. Wallis Consulting Group. Available from www.esc.vic.gov.au.

[2] AEMC , 2011. "Possible Future Retail Electricity Price Movements: 1 July 2011 to 30 June 214, Final Report." Available from www.aemc.gov.au.

[3] AEMC 2013. "2013 Residential Electricity Price Trends". Available from www.aemc.gov.au.

[4] AEMC, 2014. "2014 Retail Competition Review". Available from http://www.aemc.gov.au/Markets-Reviews-Advice/2014-Retail-Competition-Review

Australian Energy Regulator (AER)

The AER administers the National Energy Consumer Framework (NECF) but has no role in regulating the retailing of energy in Victoria. It is Victorian Government policy not to transfer retail regulation to the NECF. The AER nonetheless includes information on the Victorian market in its Annual Reports. In its 2014 annual report the AER provides data on retailer market shares and customer switching data. In its latest report (and in all previous reports) it made no adverse (or complimentary) comment on the competitiveness of the Victorian electricity retail market or whether the outcomes it is delivering are acceptable.

2.3 Consumer advocates

St Vincent de Paul

The Society of St Vincent de Paul produce very useful bi-annual reports on retail electricity prices in Victoria, analysing both reference and market tariffs. An enduring theme of their reports is that some retailers offer significantly lower prices than others.

Their July 2014 report[5] produces an interesting analysis of retail costs based on market offers to customers connected to Jemena's distribution network. From this they estimate retail charges of $380 per household, which is 25% more than their estimate of the wholesale charge. They comment "*if the retail component of households' energy bills in a competitive market is greater than the cost of wholesale energy it must be time to examine where the market design went wrong*".

Consumer Utilities Advocacy Centre (CUAC)

CUAC undertook a study of the Victorian electricity retail market cover the period 2009 to 2012. The examined market concentration using the Herfindahl–Hirschman Index (HHI) and the Four Firm Concentration Ratio (CR_4) and noted that in the three years since market deregulation there was no evidence of a significant reduction in market concentration or evidence of strong new entrant retailers. They concluded that the three first tier retailers offered similar prices to each other (this is also seems to be generally consistent with St Vincent de Paul's reports). They also suggested that in January and July 2012, new entrant retailers increased their prices as much as the first tier retailers. From this they speculated that marketing expenditure rather than price innovation and price differentiation is a significant factor affecting market share.

[5] St Vincent de Paul, 2014. "Victorian energy prices July 2014: An update report on the Victorian tariff tracking project". Available from https://www.vinnies.org.au/page/Our_Impact/Incomes_Support_Cost_of_Living/Energy/VIC/

2.4 The industry

Energy Retailers Association of Australia (ERAA)

The ERAA contends[6] that the Victorian electricity market is a fiercely competitive market. It says that since price caps were removed in Victoria on 1 January 2009 competition has developed strongly, offering customers more diverse and innovative energy products, and enabling consumers to save on their power bills by shopping around. Since this date there has been a growth in the number of smaller retailers. The Victorian market is the least concentrated in the country with the three incumbent retailers having about 70-75 per cent of the market while a range of new entrant retailers have secured about 25-30 per cent of overall customers. They draw attention to a 2012 study by consultancy vasaaETT[7] that concluded that the Victorian electricity market had the highest rate of switching in the world.[8] The ERAA also strongly rejected the ESC's 2013 findings on retail margins in Victoria.

Retailers

The retailers that operate in the Victorian electricity market seldom comment on the market, although when they do – in their annual reports or investor presentations - they usually describe it as one characterised by vigorous or intense competition. Interestingly, both Origin Energy and AGL Energy, two of the largest retailers both consistently report much lower switching rates for their customer base than for the market as a whole.

[6] See for example ERAA letter to Mr Neil Howes, Australian Energy Market Commission, 5 July 2013. Available from www.aemc.gov.au

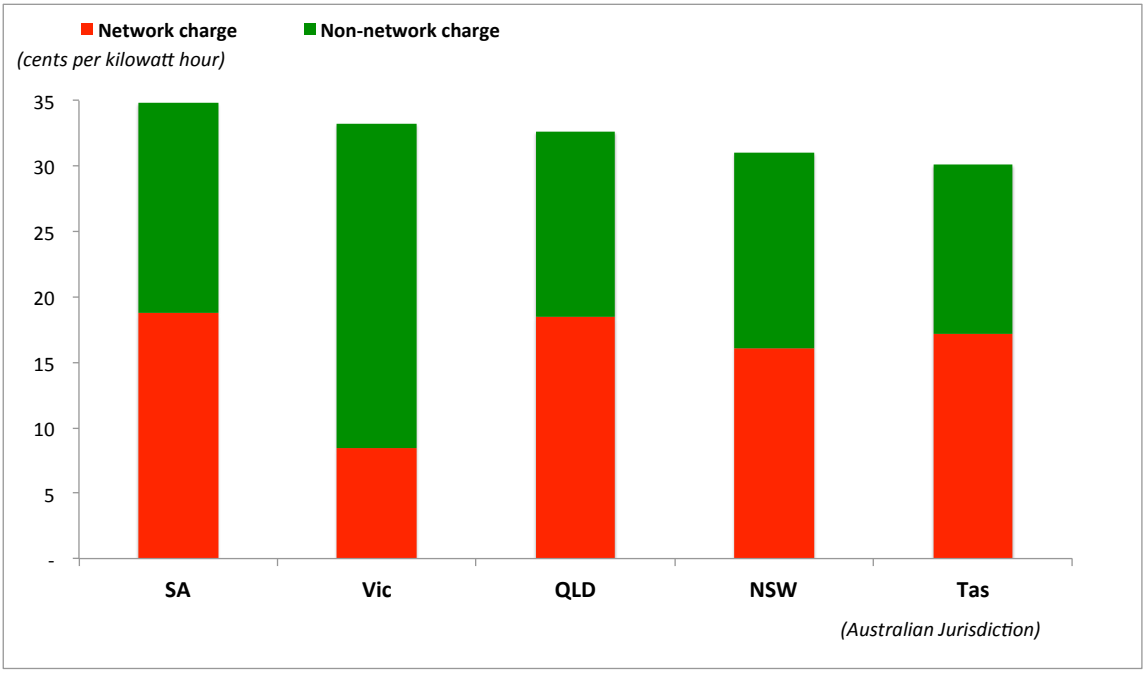
[7] VaasaETT, 2006. "World Retail Market Rankings". Available from www.eraa.com.au

[8] It is not clear that their comparison accounts for all the difference. For example the Victorian switching rates include retailer contracts with new dwellings, and when an existing consumer relocates is counted as a switch. In Victoria small non-residential customers are also included. In Britain for example switch rates do not include non-residential customers, and the ESC's analysis is that 2012 switch rates excluding new dwellings and relocations were about 40% below the rate claimed by vasaaETT.

2.5 Our analysis

This subsection sets out our analysis of retail charges in Victoria. Figure 1 below, compares the network and non-network charges in Victoria to those in other states in the NEM. The analysis is based on standing offers/regulated reference tariffs and published network tariffs in the year ending 30 June 2014. Market offers are typically lower than standing tariffs. However we have crossed checked these prices with the prices obtained from the ABS's authoritative 2012 survey[9] (discussed in further detail in this section) and indexed to 2014 using the ABS's indices and from this we conclude that the information contained in Figure 1 can be relied upon as a reasonable indication of network and non-network charges to average usage households in various parts of the NEM[10]. The figure shows a remarkable difference between average retail charges to households in Victoria compared to those charges in other states.

Figure 1. Breakdown of average price for average consumption household



[9] ABS 2013. "Australian household energy survey". Available from www.abs.gov.au

[10] We refer those readers wishing to explore this in further detail to Mountain, B. 2015. "*Network tariffs applicable to households in Australia: empirical evidence*". A report for UnitingCare Australia. Available from www.cmeaustralia.com.au. It should also be noted that there are various details that need to be taken into account in a more precise understanding of the relative size of the red and green bars. For example the green bar for Victoria, includes the smart meter costs, which account for about 1.5 cents per kWh in that year. And in South Australia and Queensland in particular solar feed-in tariffs mean that the red bars in those states should be reduced by about 1.5 cents per kWh to ensure comparison with those in other states.

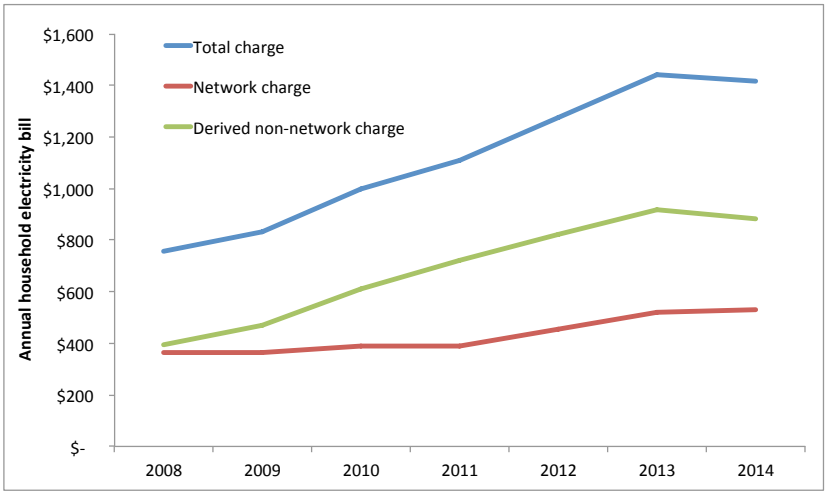
In the rest of this sub-section we estimate the retail charges to households in Victoria and then comment on market concentration, barriers to entry, barriers to switching, product innovation and consumers' views.

Retail charges

Our analysis examines the charges that retailers present to households for the sale of electricity. This amount is not presented on electricity bills separately from other charges and so needs to be estimated. Our analysis starts with data provided by the Australian Bureau of Statistics (ABS) of household electricity bills in 2012 and household electricity price indices before and after that. From this we deduct network charges (which can be reasonably accurately calculated based on known network tariffs), various non-network charges (covering environmental and metering charges) and then wholesale supply charges (which we estimate within a range). The residual from this calculation is the charge by retailers for the services they provide. The text that follows explains our calculations in detail.

Figure 2 below shows the change in the average annual household electricity bill in Victoria from 2008 to 2014 (the blue line). This is based on the Bureau's 2013 report[11] of average household electricity bills in Victoria in 2012. The values for the other years in this chart are calculated by adjusting the 2012 value for the change in the ABS's Melbourne household electricity price.

Figure 2. Total charge, network charge and derived non-network charge



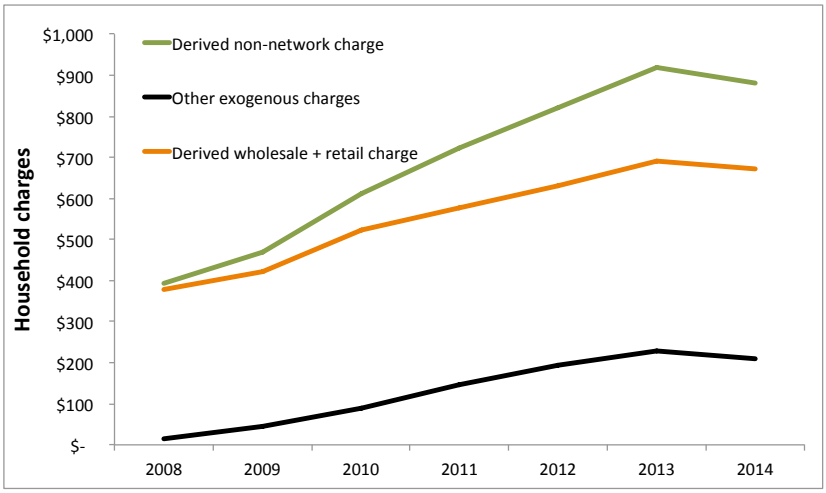
The red line in the chart is the average household network services charge which we have calculated based on the known network tariffs for each of the five distribution network service providers (and using the average consumption used in the ABS study). To obtain a Victoria-wide average we have weighted the number of connections of each network service providers as a proportion of the Victorian total.

[11] ABS 2013. "Australian household energy survey". Available from www.abs.gov.au

The difference between the blue line and the red line is the green line. This is the derived non-network charge. This non-network charge represents the charges for wholesale energy plus retailing plus a variety of environmental and metering charges which retailers incur and pass on to households.

We now proceed to strip out what we call "other exogenous charges" from the derived non-network charge. These "other exogenous charges" include payments for metering, environmental charges (feed-in tariffs, the Victorian Energy Efficient Target and the federal Renewable Energy Target). To do this we have used the analysis of other exogenous charges presented in Oakley Greenwood 2015[12],[13]. The result of this analysis gives the derived wholesale plus retail charge in Figure 3 below.

Figure 3. Derived non-network, other exogenous charges and derived wholesale + retail charge



We recognise nonetheless that the black line in Figure 3 may be slightly understated and so the resulting implied wholesale + retail charge (the orange line) may be slightly overstated, but the difference will not be large. We therefore suggest that the orange line is a reasonable estimate of the wholesale electricity plus retailer charges for the average Victorian household. The orange line shows that the inferred wholesale plus retail charge has roughly doubled between 2008 and 2014.

The next step in our analysis is to separate the wholesale electricity charge from the retail charge. This is impossible to do with certainty since the wholesale charge for different retailers is not known with certainty: many retailers produce much of the electricity they sell and their cost of production is not known with certainty. In addition while they can buy directly from the spot market or enter into physical or financial

[12] Oakley Greenwood 2015. "Causes of residential electricity bill changes in Victoria, 1995 to 2014: A report for the Victorian electricity distribution businesses."

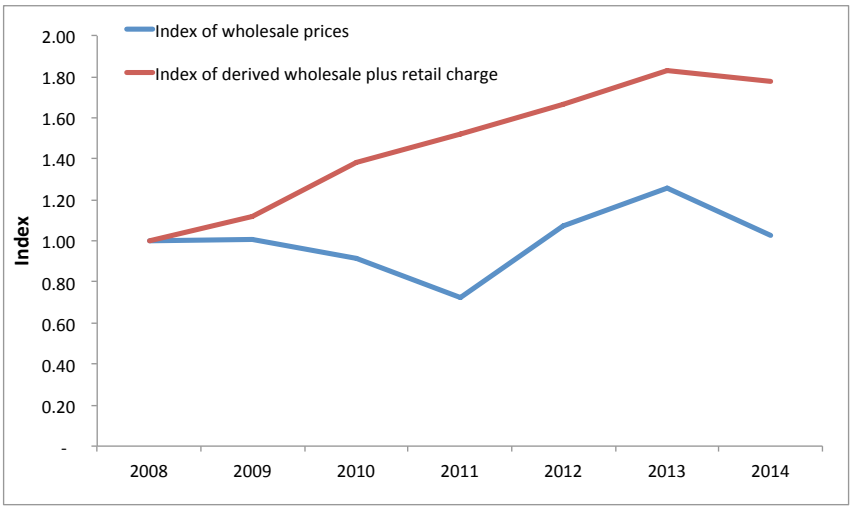
[13] The Oakely Greenwood analysis is based on a 4,0 kWh per year customer (whereas the ABS data has an average annual household consumption of 5,6 kWh). We have however not adjusted for this difference in annual consumption since the largest proportion of these exogenous charges (metering charges) are recovered per connection not per MWh consumed.

contracts the terms of these contracts (and the proportion they buy from the spot market) is not known with certainty.

We therefore need to estimate wholesale electricity charges in order to derive an estimate of the derived retail charge. Before doing this, to get a sense of how the wholesale plus retail charge has varied in comparison to a wholesale market reference price (the demand weighted spot price for the Victorian region of the National Electricity Market), we have expressed both of these as an index starting at 1 in 2008.

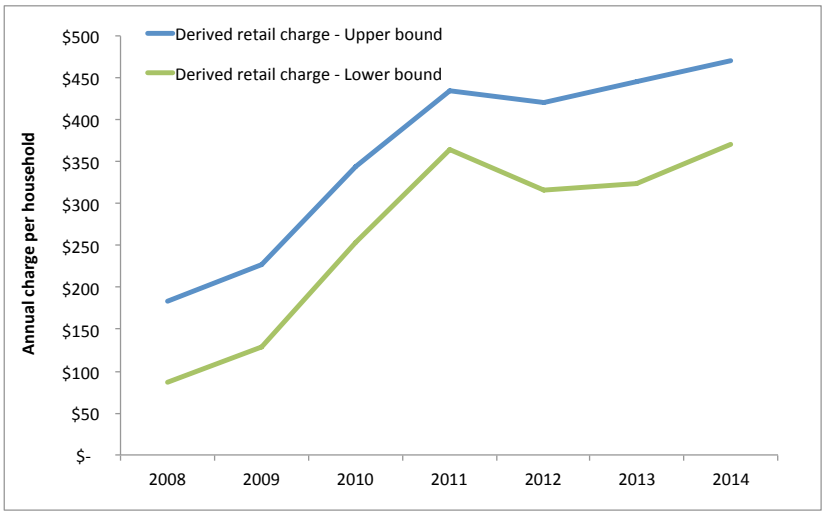
This is shown in Figure 4. This shows that the increase in the wholesale plus retail charge does not seem to be explained by changes in the wholesale price which is much the same in 2014 as it was in 2008 and varied in a range of plus or minus 30% between these dates.

Figure 4. Index of wholesale prices and of derived wholesale plus retail charges



To estimate the retail charge (the charge by retailers for the retail service they provide) we have estimate a wholesale charge within a range of plus or minus 20% of the reference price (the spot price) and deducted the resulting wholesale charge (assuming 5,585 kWh average annual consumption – based on the ABS'2 2012 survey) to give an annual retail charge in dollars per household. This is shown in Figure 5 below.

Figure 5. Derived retail charges – upper and lower bounds



From Figure 5 we see that retail charges between 2008 and 2014 increased by about 2.4 times, and by 2014 lie in the band between $371 and $471 per household per year. Throughout this period households in Victoria were able to choose who supplied electricity to them, and from 2009 to 2014 there was no control over retail prices.

We have benchmarked our estimate for the retail charge with the estimates that others have made:

- As discussed St Vincent de Paul estimated the retail charge for customers connected to Jemena's network in 2014 at $381. This is within the range of our estimates.
- The AEMC estimated the retail charge in Victoria in 2011 (based on standing offers) at 34.4% of the total bill. This is slightly above our upper bound for 2011.
- The ESC's consultants produced various estimates of "gross margins" (which is definitionally comparable to our estimate of retail charge) for first tier suppliers based on standing offer and market offers. For 2012 these ranged between 26.5% and 46%. The bottom end of their range is a little above the bottom of our range and the top end of their range is above the top of our range.

Market concentration

From the time the market was liberalised in 2002, new entrant retailers have grown to supply about 25% of the Victorian electricity market. However since 2008 (the last year during which regulated tariffs were available) and 2014, the market share of the three dominant first tier retailers has remained roughly unchanged.

Since 2002 there have been a number of new entrant retailers. However once they reach a certain size they have been acquired by one of the three first tier retailers (and in one case by a government-owned generator already with a significant retail business in Victoria, albeit that some of these acquisitions have arisen as a result of privatisations in Queensland (Powerdirect) and New South Wales (Country Energy and Energy Australia). Specifically:

- The acquisition of Powerdirect by AGL Energy in 2007;
- The acquisition of Country Energy and Energy Australia by Origin Energy and TRUenergy respectively in 2010;
- The acquisition of Australian Power Group by AGL Energy in 2013;
- The acquisition of Lumo by Snowy Hydro in 2014.

With the exception of Lumo's acquisition by Snowy Hydro, the pattern has therefore been a decline in the market share of the first tier retailers who have then bought customers back by acquiring second tier retailers. Snowy Hydro with its organically built Red Energy and acquired Lumo energy retail businesses stands as the one exception of a non-first tier retailer to have built a significant (circa 20%) share of the Victorian household electricity retail market.

Barriers to entry

It is not clear to us that there are meaningful barriers to entry in the Victorian electricity retail market. The ESC's licensing requirements do not seem to place undue burdens on retailers. Likewise in the context of significant uncontracted generation we suspect it is unlikely that new entrant retailers would find the management of wholesale market price risk to be unduly onerous.

Barriers to switching

It is not obvious that there are significant barriers to switching. Around three quarters of the residential market is now supplied on market contracts. While the switching numbers quoted by the ERAA and AER may be significantly higher than the actual switching rates (according to the ESC 17% in 2012, against the AER and ERAA's claim of 28% for that year), a switching rate of 17% is still a significant rate of customer churn. It is interesting to note in this regard that AGL Energy expects that by the end of the first full year after the acquisition of APG it will have lost around 35% of the APG customers it had acquired, and AGL noted that this is consistent with its business case for the acquisition of APG[14].

It might be argued that search costs are low – there are numerous government-provided and commercially-provided price comparison and switching websites. Finding a better deal should not take too much effort. However St Vincent de Paul's analysis shows that most retailers' offers are clustered together. Consumers may be able to get much better deals by, for example, changing from one type of tariff to another, but this often requires a sophisticated knowledge of tariffs and data on annual consumption and expected consumption at different times of the day. Such data is almost impossible for the typical residential consumer to obtain.

Furthermore even if much better deals can be had in the market from time to time, it seems that such savings don't seem to persist. As evidence of this we point to the high switching rates and AGL Energy's expectation that it will lose more than a third of the customers it acquired through the acquisition of APG, after the first year.

Product innovation

On product innovation it seems difficult to see that there has been much progress. In its critique of the ESC's consultant's retail margins report, the Retailer Association's consultant suggested a number of reasons why the ESC's consultant had over-stated margins[15]. This included magazine subscriptions, airline and credit card loyalty program points, monthly cash prize draws and gift cards. At the time of writing this report we checked the offers of Victoria's three largest electricity retailers. One of them

[14] See AGL ASX Media Release 11 February 2015. Available from www.agl.com.au
[15] See Deloitte, 2013. "Retailer margins in Victorian Electricity Market: A report to the Energy Retailers Association of Australia". Included as an attachment to ERAA letter to Mr Neil Howes, Australian Energy Market Commission, 5 July 2013. Available from www.aemc.gov.au

offered "flybuys" loyalty points at the rate of 1 per dollar spent – which is about 1400 points per household per year. To get a sense of the value of this, the "flybuys" website's featured offer was $20 worth of clothes for 2000 points. On this calculation, almost two years of electricity purchases would be rewarded with a $20 clothing voucher.

Other new entrant retailers do offer air miles and one offers a gift card to new customers. But it is hard to imagine that this might be taken as evidence of product innovation, or as evidence that retailers' margins (as we and others have estimated them) are overstated. The Wallis survey cited earlier suggests consumers think such rewards are inconsequential in their switching decisions.

Other "innovations" include discounts for online accounts, dual fuel, direct debt or prompt payment and so on. The Wallis survey suggests consumers place a little value on these in their switching decisions. Some retailers offer free power on saturdays or the electricity retail equivalent of "happy hours". Most offer sign-on bonuses, typically credited to the account and some offer finder fees (again credited to the account). This might be good evidence of marketing to attract and retain customers and management by retailers of their of credit risks, but surely not of product innovation.

One new entrant retailer with a tiny share of the market is known to offer highly innovative retail products that offer consumers the opportunity to buy ahead and monitor their hourly, daily, monthly and annual consumption through online and mobile applications. This same retailer has entered the retail market in New South Wales – which according to the AEMC as noted earlier has much lower retail margins than Victoria.

Thirteen years after the Victorian retail market was opened to competition and several years after smart meters were rolled-out, the vast majority of retail sales are still on simple two part tariffs with no time of use differentiation. No retailers offer tariffs without fixed daily charges, and none offer tariffs with demand charges. Perhaps retailers have assessed that consumers don't value this, perhaps it is because they find easier ways to attract and retain customers. It is telling that the recently departed Chief Executive of the most successful new entrant retailer in Victoria (Australian Power and Gas) described the Victorian electricity market in 2014 as an oligopoly offering a "commodity" product[16].

Consumer views

National surveys consistently rate concerns about electricity prices at or near the top of the list of household concerns.[17] A recent survey[18] undertaken for the AEMC found that

[16] See http://www.crikey.com.au/2013/07/16/power-sale-how-they-doorknocked-customers-then-sold-them-back/

[17] See for example http://consumersfederation.org.au/choice-consumer-survey-reveals-growing-economic-gloom/.

retailers in Victoria scored worse than the average in the National Electricity Market in respect of household consumers' satisfaction with their current electricity company, their quality of service, their value for money and market choice.

2.6 Conclusions

This section has surveyed others' views of the Victorian electricity market and then presented our own, brief, analysis. On others' views:

- The ESC is concerned about retailer margins. By contrast neither the AEMC nor the AER have expressed any concern about the competitiveness of the Victorian retail electricity market or retailer charges and margins.

- The association representing energy retailers disputed the Essential Services Commission's concern about retail margins. In their statements to investors, the two largest stock exchange listed Victorian retailers typically describe the Victorian retail market as highly or intensely competitive. Other retailers are less effusive, describing the industry as an oligopoly.

- The Victorian Government has expressed concern about the size of fixed charges[19] but also that the Victorian electricity market is one of the most competitive in the world[20], although officials[21] and politicians[22] have expressed concern about retailer margins.

- Consumer groups representing low income consumers are concerned about market concentration and excessive retail charges.

From the evidence we have surveyed in developing this report we conclude that there do not seem to be significant barriers to entry to new entrant retailers, that the transaction costs that customers incur do not seem to be a barrier to switching retailer, and that the effort and costs that customers incur to find better deals (if not the best deals) do not seem significant. However, the effort required to find the best deal, not just a better deal - the St Vincent de Paul's reports show consistently that there is a big gap between the best and the median - may be significant. Furthermore, the evidence seems to be that the best deal does not stay the best for long – not because other better

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[18] See Newgate, 2014. "Consumer Research for Nationwide Review of Competition in Retail Energy Markets". Available from http://www.aemc.gov.au/Markets-Reviews-Advice/2014-Retail-Competition-Review

[19] See for example http://www.abc.net.au/news/2015-02-07/gas-electricity-fixed-costs-up-50pc-in-victoria/6077396

[20] See for example http://www.energyandresources.vic.gov.au/energy/electricity

[21] See for example http://www.theaustralian.com.au/business/latest/victoria-looks-to-act-on-electricity-margins/story-e6frg90f-1227080728468

[22] See for example http://www.theage.com.au/victoria/soaring-power-costs-leads-to-record-number-of-disconnections-in-victoria-20150218-13i4lt.html

deals are available in the market – but because having attracted customers through discounts, retailers do not seem to wait long to raise their prices.

This is where the ambiguous or at best positive picture ends. There seems to be a considerable amount of highly adverse evidence:

- The Ombudsman reports electricity retail complaints reached their highest ever levels in 2014[23], 50% higher than four years earlier. Billing problems accounted for half of all complaints.

- Electricity disconnections in Victoria in 2014 – at around 1% of all connections - is at an all-time high.

- While there are some new entrant retailers offering genuinely innovative products they serve a tiny proportion of Victoria's electricity consumers, and have anyway entered other retail markets in Australia where retail charges are much lower than in Victoria. Despite an expensive mandatory roll-out of smart meters, most consumers are still supplied on the same time-invariant two part tariffs structures that have been in place for many decades.

- The survey evidence on consumers' views about retailers is not encouraging. Households in Victoria are less satisfied with their current electricity company, their quality of service, their value for money and market choice than the average of households in the National Electricity Market. This is despite systematically higher switching rates in Victoria than elsewhere in NEM, and that the smallest proportion of Victorian electricity consumers are supplied on reference tariffs: evidently switching retailer is not bringing Victoria's household consumers the satisfaction they are seeking.

- The unsatisfactory consumer assessment is matched by even less satisfactory retail charges. Our assessment is that retail charges have more than doubled since regulated reference tariffs were in place in 2008, and are now far higher than elsewhere in the NEM and than the cost of producing electricity. The suggestion that a significant part of the higher retail charge is paid back to consumers in gift cards, fly-buys and other loyalty credits does not seem plausible.

- Finally, the pattern of new entrant retailers gaining scale and then being acquired by one of the three dominant retailers means that the three dominant retailers have retained their market share since prices controls were lifted in 2009. This roundabout will have delivered gains to investors in the new entrant retailers, and presumably the retailers that acquired them are satisfied (or they would not have chosen to buy). Some of the customers who switched between retailers at different points will have obtained better prices than market averages. But to what end is such a roundabout with all its attendant costs?

[23] See EWOV Annual Report, 2014. Available from www.ewov.vic.gov.au

A conclusion from this is that the Victorian electricity retail market does not seem to be delivering to consumers what they want, and that it seems to be offering poor value for money relative to what it has in the past and relative to retailing elsewhere in the National Electricity Market. The Victorian market has had time to evolve: households have been able to choose their suppliers for 13 years, and six years ago all price controls were lifted. Would decision-makers have set the market on its current course if they were able to predict where things seem to have got to now?

However, we stress that our report does not purport to be a comprehensive examination: our conclusions should be considered tentative. Markets are complex and finding out what is really going on takes careful study and reflection. It would be valuable to understand the position not just of consumers on average relative to retailers on average, but cohorts of consumers relative to each other and cohorts of retailers relative to each other. Have some consumers fared much better than others, and if so why? Have consumers failed to take advantage of opportunities or have retailers benefitted from those that are unwilling or unable to take advantage of opportunities?

Littlechild (2015) asks whether evidence that consumers can get a lower price by shopping should be taken as evidence that the market is working, or is evidence that they pay a higher price if they don't shop around, evidence that the market isn't? This seems to be a key question in the Victorian electricity market. Can consumers indeed get an (enduringly) better deal by shopping around? Do the apparently better deals that they select turn out to be worse deals in due course? And so are consumers, once bitten twice shy? Do survey's such as the Wallace survey that suggest many consumers "can't be bothered" to shop around, indicative of their willingness to pay higher prices or are there other explanations for this? Finally, since electricity is essential for most households, and there are limited or no substitutes in many cases, should consumers be entitled to some level of regulatory protection even if they don't actively engage in the market, or, "the devil take the hindmost"? Can such protection be designed so as to improve outcomes for all consumers or is it inevitable that protection for some is at the others' expense?

Further examination may support or undermine our findings or offer plausible explanations for at least some of the adverse outcomes that we have observed. However, at this stage, on the basis of the evidence we have reported on in this paper, we cannot conclude other than that the Victorian retail electricity market seems to be delivering clearly unsatisfactory outcomes, at least in respect of sales to households.

3 Possible actions

This section considers, briefly, a number of possible actions. The purpose is not to recommend any such actions but rather to describe some possibilities and identify issues that might be considered in each.

Littlechild (2015)[24] criticises Ofgem's various interventions in the retail market in Britain over the last few years, suggesting that the cures have been worse than the disease, or to be more precise that there was no disease in need of a cure. In Australia by comparison, there has been no administrative intervention in the Victorian electricity market since 2009. And the Victorian arrangements have been promoted by the ERAA and AEMC as the model for the deregulation of other retail electricity markets in Australia.

A decision to intervene must be justified on the basis that it will make things better. This requires judgment that there is a problem to be solved and that doing something about it will make matters better not worse. The previous section suggests that outcomes in Victoria's household retail market are unsatisfactory, and that when there was previously some form of intervention (regulated standing offers) retail charges were much lower. It is hard to know whether consumers thought they were better off then, but it is clear that they have taken a long time to move from those regulated standing/reference tariffs: six years since administrative restraints on those tariffs have been relaxed and 13 years since consumers could choose market offers, one quarter of households are still supplied on those reference tariffs.

We also pointed to evidence that Victoria's households think they are worse off than the average households in the NEM, and that Victoria's retail charges are much higher (at least twice as high as elsewhere) in the NEM and that they have increased since the regulation of standing offers was withdrawn. Faced with this evidence – presuming it withstands further scrutiny – the desire to make changes is understandable.

In the rest of this section we examine three possibilities:

- Transparency
- Tariff simplification;
- Reintroduction of regulated standing tariffs;
- Regulation of fixed charges.

However, before examining these we describe work to understand the situation in Victoria better. We think work on this is essential to understanding the current situation, and in justifying any major changes that might follow.

[24] Littlechild, S. C. 2014. "Promoting or restricting competition?: Regulation of the UK retail residential energy market since 2008". EPRG Working Paper 1415. Available from www.eprg.group.cam.ac.uk.

3.1 Transparency

Greater transparency is usually one of the first options that governments and regulators turn to in promoting markets. Considerable effort has been made on this in Victoria. The survey results on this are encouraging: 87% of respondents are quite or fairly interested in energy issues; 95% are aware of that they can choose their supplier; 79% are fairly or quite confident in their understanding of offers and options. The knowledge of comparison websites (41%) is less encouraging, but lack of information does not seem to be a major concern.

Transparency is valuable also in assessing and understanding the market. We have found the ESC's reports invaluable in making our assessments, and the customer survey commissioned by the AEMC in 2014 has also been very useful. The ESC's retail margin studies drew a strongly critical response from the industry. But our assessment is that their response is longer on heat than it is on light and the information obtained through this process is extremely valuable.

Further effort at understanding the operation of the market and its outcomes including those difficult to estimate – such as net margins – will be valuable. Questions that have attracted our attention include:

- Why there is apparently so little evidence of innovation? For example why is there so little up-take of time-variant tariffs and why do retailers not offer tariffs without fixed charges, surely this is a demand for such products in the market?
- Why fixed charges in retail contracts in Victoria (see Section 3.3) are so much higher than elsewhere in Australia (and internationally)?
- Whether the track record of new entrants as we have understood it – growth followed by acquisition by one of the incumbents - is a reasonable description of the pattern of new entry? If so what should be concluded from this about the competitiveness of the market?
- Whether the apparent profitability meaningfully overstated after accounting for loyalty rewards ?
- How profitable retailing electricity to households and small businesses in Victoria actually is? In this regard we note the long-standing work of Ofgem and the recent work by the Competition and Markets authority[25] in analysing retailer profitability in Great Britain. It would be valuable to obtain estimates of earnings before interest and tax (EBIT) and gross profit less indirect costs and depreciation and amortisation (D&A) from the retail sale of electricity to Victorian households and small businesses. International comparison would be helpful and ensuring a consistent approach in Victoria with the approach adopted in GB would help such international comparison.

We suggest that work to develop a better understanding of these issues would be valuable before taking further action.

[25] See CMA, 2015. "Energy market investigation. Profitability of retail energy supply: profit margin analysis". Available from https://www.gov.uk/cma-cases/energy-market-investigation

3.2 Tariff simplification

The arguments for tariff simplification can be found in observations in behavioural economics that too much choice confuses and disempowers consumers. The implication is that consumers are less likely to participate in a market, and so the competitiveness of the market is diminished.

It is not clear that there is a problem of too much choice in the Victorian electricity markets. The survey commissioned by the AEMC suggests that consumers think they are aware of their options and understand the market. And the switching data points to a liquid market even if, as we suggest, consumers are not always armed with the information and skills to work out the best deal on offer.

We also refer again to the observation of the ex- CEO of Victoria's most successful new entrant retailer, that the Victorian electricity market is a commodity market. If anything, we would have thought that the problem is not that the market seems to offer too many confusing choices, but that it offers too few sophisticated choices.

There are other good arguments against intervention to reduce choice. Littlechild (2015) observes that consumers prefer simplicity but not if it means higher prices. Forcing consumers to pay higher prices on simpler tariffs in order to enhance market liquidity is a difficult argument to sustain.

Mostly however, we seem to be at the start of a new era of distributed generation, storage and smart meters. We are more confident that competing retailers, rather than regulators, will be able to find retail products that offer value to consumers in this more complex and data intensive environment. Governments should be wary before intervening in ways that may stunt product innovation in the hope that apparent simplicity will deliver greater competition.

3.3 Reintroduction of regulated standing tariffs

Our analysis suggests that average retail charges were lower when regulated standing offers were available, up to the end of 2008. This is despite the fact that these standing offers included "headroom" designed to provide an incentive for new entrant retailers. It is tempting therefore to suggest that one possible solution would be to reintroduce regulated standing offers (just as they are being withdrawn in other regional markets in Australia).

We think it would be worthwhile exploring this further. The market share of new entrants was higher and retail charges were lower when regulated offers were available. Its difficult to see that there was any less innovation then than now and there does not seem to be evidence that consumers are more satisfied then than now: indeed as noted earlier comparing Victoria with other retail markets, the Newgate survey suggests the opposite.

On the other hand it may be suggested that reintroducing regulated tariffs is like trying to put the genie back into the bottle – an exercise in futility. And, with almost all

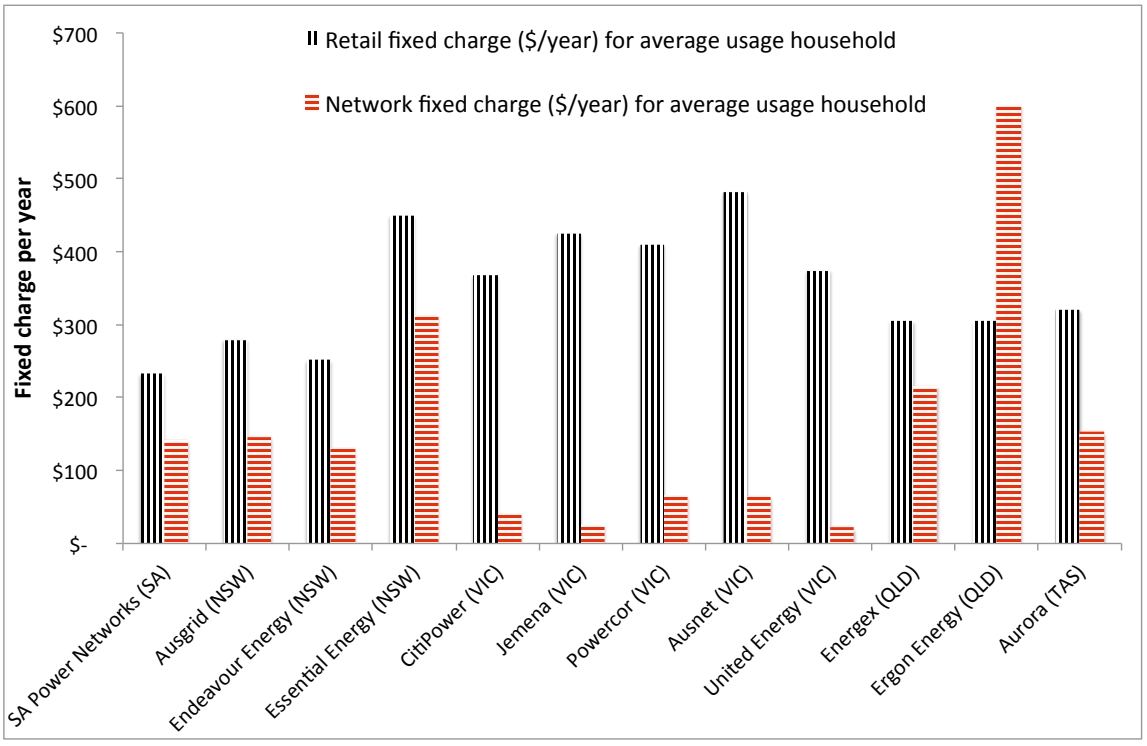
Victorian households and small businesses now having smart meters, many households now having distributed generation and probably some level of distributed storage in future, the job of defining appropriate regulated reference tariffs may be much harder than it was just five years ago.

For these reasons, while the reintroduction of regulated retail tariffs merits further investigation we think it should be approached with care.

3.4 Regulation of fixed charges

The black (vertically shaded) bars in Figure 6 below shows the annual fixed charges ($ per year) that households were paying in 2014 on reference tariffs (regulated other than in Victoria). The red (horizonally shaded) bars are the fixed charges in the regulated network tariffs that are charged to retailers in respect of their supply to household. The chart shows clearly that retailers in Victoria are paying much lower fixed charges to network service providers[26] than retailers elsewhere in the NEM are paying to the network service providers in their areas of supply.

Figure 6. Network and retail fixed charges ($/year) for electricity supply to households in the National Electricity Market in the year to 31 December 2014



For an average household electricity bill in Victoria of around $1,400 in 2014, around 30-40% of the charge is fixed. The proportion is even higher in 2015. This is a higher

[26] Citipower and Powercor have both increased fixed charges in 2015.

proportion than elsewhere in the NEM, and we believe far higher than for household electricity bills in other developed economies[27].

In addition, as St Vincent de Paul's tariff reports show, market offers typically offer discounts against the variable charge only – the daily fixed charge is based on the charges in standing offers. This means that the proportion that is fixed is even higher than the estimates in Figure 6 which based on reference tariffs.

The high fixed charges mean that lower consumption consumers (typically lower income households) pay much higher average prices than higher consumption households. For example, in AusNet's area of supply, the fixed charge raises average annual prices by 4 cents per kWh for households that consume twice the average but by 16 cents per kWh for households that consume half the average.

We are not aware of any retailer in Victoria that offers a variable-only tariff (i.e. a tariff that does not have a fixed charge). One new entrant retailer that offers innovative retail products is, as far as we are aware, the only retailer to include the daily fixed charge in its calculation of discounted "powerpacks".

It might be that a part of the higher fixed charge in Victoria is related to the recovery of smart meter charges. These have become significant (between $109 and $226 per connection) in 2015[28], though the charges have been much smaller than this in previous years and retail fixed charges were still much higher than network fixed charges even when smart meter charges were much lower.

If retail tariffs were regulated we would call on theoretical arguments that such fixed charges are inefficient: in regulated utilities as in markets, prices should be set so that they reflect marginal costs, not (sunk) fixed costs. If this leaves a revenue shortfall for some sellers, recovering the shortfall through fixed charges limits the ability of consumers to adjust their consumption in efficiency-enhancing ways. It would be more efficient to recover revenue shortfalls through volumetric or demand charges to which consumers are able to respond, if they choose to, by reducing or changing the pattern of their consumption.

In addition, tariffs with high fixed charges are regressive (lower than average household electrical consumption is correlated with lower than average household income). High fixed charges diminish incentives to efficient consumption and undermine households' ability to reduce their bills by consuming less or producing electricity themselves to meet their own requirements.

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[27] In large parts of the United States for example, household tariffs are purely volumetric and in some cases have small fixed charges typically to recover customer-specific fixed charges such as metering and billing.

[28] See AER 2014 "Determination Advanced Metering Infrastructure 2015 revised charges", available from www.aer.gov.au.

It might be suggested that such theoretical efficiency and fairness considerations are irrelevant because the market for supply to households is contestable. However for the reasons set out in the previous section, the effectiveness of retail competition in Victoria is not clear. In this context, and having particular regard to the regressive and anti-competitive impact of high fixed charges, we believe controls over fixed charges merit further investigation.

3.5 Conclusions

This report raises questions about the effectiveness of competition in the Victorian electricity retail market. We understand that the Victorian Government is also concerned about aspects of the market and that the ESC is investigating starting a review, building on its previous work. We have identified a few options to be pursued but suggest that understanding the market better is an important starting point. It would be helpful if the issues raised in this paper were to be investigated in further detail by the ESC and the AER, in a process that actively engages consumers and the industry.