



The Effectiveness of
Competition and Retail Energy
Price Regulation

*A discussion paper prepared by
KPMG for the Energy Retailers
Association of Australia*

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1 Executive summary

This discussion paper has been commissioned by the Energy Retailers Association of Australia (“ERAA”) to facilitate an informed debate covering competition and regulation in the Australian energy market.

Its aim is to provide a basis from which governments, industry and the community can begin to understand the issues surrounding competition and regulated prices.

It is intended to link together some of the historical and current circumstances surrounding the industry.

No recommendations have been made in this report but some views and observations have been made by the authors which are not necessarily those of the ERAA or any of its members.

1.1 Key findings

Governments in the States where full retail competition (“FRC”) has been introduced are generally arguing that price regulation is necessary because retail competition is not yet effective – with effective competition being essentially an economic judgment. In the States where FRC has not yet been introduced there is a broader scepticism about whether the benefits of FRC outweigh the costs – again this is an essentially economic judgement.

However, the evidence from our stakeholder consultations and our analysis suggests to us that price regulation and delays to FRC are primarily about achieving largely unarticulated political, rather than stated economic, objectives.

The political interest that price regulation and delaying FRC serves in the short term is that it positively prevents the possibility of price shock for customers, particularly for those who are currently the beneficiaries of cross subsidies.

We think there is compelling evidence to support the argument that price regulation is primarily concerned with avoiding price shock. It includes:

- Legitimate fears about the outcomes competition might produce;
- The way price regulation has been implemented;
- The tests against which the competitiveness of retail markets are being assessed both in the UK and now in Australia;
- The material published by regulators and governments on this issue;
- The views of many public servants and regulators with whom we consulted; and

- The widespread scepticism amongst many public servants, regulators, and consumer groups that the market will “benefit” the majority of small consumers, where benefits are interpreted to mean lower prices for all.

In our opinion, to the extent that price regulation is about effective competition, it is more about “protecting” customers from competition that is effective, rather than ineffective. This is because the more effective competition is, the more likely it is that cross subsidies will be unwound. Indeed, the irony is that from a political perspective the more effective competition is, the *greater* the need for price regulation.

We think the debate about the effectiveness of competition therefore overlooks the key point.

Nevertheless, some governments have made the link between effective competition and price regulation, and are asking their regulators to review the effectiveness of retail competition. These governments are requiring that the industry demonstrate it is effectively competitive. Such a requirement presents the industry with a significant challenge because it:

- Reverses the burden of proof;
- Exacerbates the burden of proof for the retail market; and
- Effectively provides governments with enormous discretion and presents an argument we think the industry will find hard to “win”.

In our view, it should not be necessary to develop criteria on which to assess the effectiveness of retail energy competition. It should be assessed in the same way as any other market (ie. via the *Trade Practices Act*). If, however, the effectiveness of competition is going to be assessed, then it should focus on three key issues. These are that:

- Customers are aware that they have a choice;
- Customers know how to exercise choice and it is easy to do; and
- Choices (i.e. offers) are being made available to them.

In assessing the effectiveness of competition regulators should rely on objective market evidence to ensure that they are applying tests consistent with effectively competitive markets. The only objective market evidence that is available on the conduct of the retail energy market comes from other similar markets. Similar markets are likely to include retail energy markets in other countries and the markets for telephone, insurance and banking services.

1.2 Putting the findings into context

The ERAA’s Terms of Reference was based on two working presumptions:

- That the motivation for retail price regulation is a function of the ineffectiveness of competition; and

- That improving the customer protection frameworks particularly for “vulnerable” customers would assist in justifying the removal of price regulation.

In our opinion both of these presumptions are questionable.

We have formed this opinion on the basis both of the outcomes of the stakeholder consultations and our own analysis.

In short, we do not believe that the reluctance to deregulate retail prices is primarily about the ineffectiveness of competition or the protection of vulnerable customers.

This report therefore:

- Identifies the reasons why the presumptions are mistaken and examines the implications for how price deregulation decisions are likely to be made; and
- Identifies the criteria on which one might assess the effectiveness of retail energy competition, if such assessments were to be made.

A separate report addresses the issues associated with vulnerable customer protection in more detail.

1.3 The rationale for price regulation

In respect of rationale for retail price regulation, the key findings cover:

- Price regulation;
- The effectiveness of competition; and
- Vulnerable customer protection frameworks.

Price regulation

Governments in the States where full retail competition (“FRC” or “competition”) has been introduced are generally arguing that price regulation is necessary because retail competition is not yet effective – with effective competition being essentially an economic judgement. In the States where FRC has not yet been introduced there is a broader scepticism about whether the benefits of FRC outweigh the costs – again this is an essentially economic judgement.

On the basis of our stakeholder consultations and our other analysis, the evidence suggests to us that price regulation and delays to FRC are primarily about achieving largely unarticulated political, rather than stated economic, objectives.

The particular political interest that price regulation and delaying FRC serves in the short term is that it positively prevents the possibility of price shock for customers, particularly for

those who are currently the beneficiaries of cross subsidies.¹ Vulnerable customers are likely to be beneficiaries to some extent, but so are many other customers (as Section 5.5 shows).

We think there is compelling evidence to support the argument that price regulation is primarily concerned with avoiding price shock. It includes:

- Legitimate fears about the outcomes competition might produce.

Economic theory and practical experience suggest that competition will lead to two main forms of efficiency gain: allocative and productive. Allocative efficiencies are generated through more cost reflective pricing. Productive efficiencies are generated through improvements in business processes that ultimately lead to lower prices.

Relative to pre-existing regulated prices, the price changes associated with allocative efficiency are likely to be more significant for most customers and are likely to be felt more quickly than those associated with productive efficiency.

They are likely to be more significant because energy prices have, in the past, been set partly with social policy objectives in mind (i.e. keeping prices artificially low for particular customer groups - and sometimes overall). They are likely to be felt more quickly because prices can be adjusted easily absent price regulation, and will be where they are unprofitable. In contrast, it takes time for improvements in business processes to occur and to be passed to customers in lower prices or better service.

In the absence of price regulation it is feared (perhaps reasonably) that some customers would see significant price rises, even if the overall price trend is downward.

- The implementation of price regulation.

Generally, price regulation has been implemented with overall price constraints (i.e. on the average price) *and* constraints on particular tariffs (and often tariff components). If the concerns that led to price regulation were fundamentally with market power, then only the broader form of price control would be necessary. In other words, retailers would be free to rebalance prices without changing the average price, which is what is likely to happen when cross subsidies are unwound.

- The tests against which the competitiveness of retail markets are being assessed both in the UK and now in Australia.

These tests are highly subjective, which highlights the lack of economic rigour underpinning the “justification” for price regulation.

The UK is one of the few countries to make the transition to competitive, price deregulated retail energy markets. The subjectivity of the tests applied in the UK is illustrated by the fact that the Regulator did not deem retail competition was “effective” when deregulating prices. Instead, the Regulator drew the conclusion that price regulation “*would be more harmful than helpful.*” In other words, the costs and benefits

¹ Price shock can arise if wholesale energy costs increase but this has little to do with retail competition *per se*. Moreover, ultimately these costs have to be addressed whether or not prices are regulated.

of price regulation were weighed against the costs and benefits of price monitoring. It was therefore a decision made on the basis of a subjective assessment.

Meanwhile, in NZ they took the view that no price regulation was necessary from the start of the market and the outcomes have been broadly consistent with those in the UK.

- The material published by regulators and governments consistently refers to the importance of distributional or equity issues. The price deregulation process in the UK had a similar focus;
- Many of the public servants and regulators who we consulted with were prepared to concede (on an anonymous basis) that the real issue related to avoiding price shock and cross subsidies; and
- A widespread scepticism amongst many public servants, regulators and consumer groups that the market will “benefit” the majority of small consumers, where benefits are interpreted to mean lower prices for all (which is unlikely if cross subsidies exist).

Section 5.5 identifies the customers that price regulation might be protecting (i.e. the customers who are probably being subsidised under regulated prices).

The implication we draw from this is that price deregulation is only likely to occur in two broad sets of circumstances:

- When (materially) all customers see price reductions; or
- When external imperatives provide sufficient justification for a course of action that is perceived to be politically risky.

It is not immediately obvious what circumstances might lead to either condition being satisfied in the short term (eg. other than a fall in wholesale prices or the collapse of a retailer), and creating them may well be beyond the retailers’ control.

There is, however, a consensus amongst public servants and regulators that where competition is introduced, price regulation should at some stage be removed. This is unlikely to change.

The effectiveness of competition

In our opinion, to the extent that price regulation is about effective competition, it is more about “protecting” customers from competition that is effective, rather than ineffective. This is because the more effective competition is, the more likely it is that cross subsidies will be unwound. Indeed, the irony is that from a political perspective the more effective competition is, the *greater* the need for price regulation.

We think the debate about the effectiveness of competition therefore overlooks the key point.

Nevertheless some governments have made the link between effective competition and price regulation, and are asking their regulators to review the effectiveness of retail competition. These governments are requiring that the industry demonstrate it is effectively competitive. Such a requirement presents the industry with a significant challenge because it:

- Reverses the burden of proof.

Generally, it is assumed that potentially competitive markets produce outcomes consistent with customers' interests unless there is compelling evidence to the contrary. Moreover, it reverses the burden of proof on an issue that is very difficult to "prove" objectively – defining effective competition is extremely difficult both in theory and in practice.

- Exacerbates the burden of proof for the retail market.

Retailers are required to "prove" that the market is effectively competitive while it is subject to comprehensive price regulation (for a largely homogenous product). Moreover, it exacerbates the burden of proof by requiring that the industry demonstrate it is effectively competitive, when it has an obvious vested interest in the outcome.

- Effectively provides governments with enormous discretion and presents an argument we think the industry will find hard to "win".

Even if the industry could win this argument, it might be a pyrrhic victory because it fails to deal with what we believe is the primary concern of governments.

Consequently, we think the debate about the effectiveness of competition is unlikely to have a significant positive impact on price deregulation because it does not really address the issue of concern. It could, however, have a significant negative impact on price deregulation because failure to make an almost unprovable case provides governments with an excuse to continue with price regulation. It therefore remains an issue of some importance.

Customer protection frameworks

Our stakeholder consultations and analysis suggest that vulnerable customer protection frameworks and price regulation are not strongly linked. They are delivered largely via separate mechanisms, and the former targets a much smaller and politically less important group than those that benefit from the latter.

Price regulation is just one of the tools that are currently used to protect customers. It protects those who might face price increases in the absence of price regulation (i.e. those being cross subsidised now, as is discussed in Section 5.5).

Trading off retail price deregulation through better vulnerable customer protection frameworks is unlikely to be feasible because:

- There appears to be limited political will for price deregulation;

- Stakeholders are not linking price deregulation and vulnerable customer protection; and
- The frameworks that are in place enjoy fairly widespread support, so improvements are unlikely to substantially increase support for price deregulation.

Decisions to improve vulnerable customer protection frameworks should therefore be made on their merits.

However, customer protection frameworks that are not working well will have a negative impact on the case for price deregulation. This is true both for general customer protection frameworks and those for vulnerable customers.

These issues are addressed in further detail in our report on vulnerable customer protection.²

1.4 Assessing the effectiveness of competition

As discussed above, we think the debate about the effectiveness of competition overlooks the key reason why retail prices are regulated. If, however, the effectiveness of competition is going to be assessed, our key findings are as follows. They are outlined in terms of:

- The nature of retail energy services;
- The general lessons from the international experience;
- The distortions that exist in the Australian retail energy market;
- Assessing the effectiveness of competition; and
- The tests to apply in assessing the effectiveness of competition, including the lessons from the UK in this respect.

The nature of retail energy services

The retail energy purchase decision is a *low involvement* decision, but also one with which customers are unfamiliar. The evidence suggests that domestic customers will afford very low importance to this decision, and do so for good reasons. In other words, in general they will not give much thought or time to the decision. They will also tend to be risk averse due to their uncertainty associated with the benefits of switching.

The value customers attach to retail energy services has important implications for the ways in which retailers compete. However, there are a number of other services that customers appear to view in similar ways. The markets for these services are likely to display similar competitive activity to energy retailing.

² See, KPMG Policy and Regulatory Advisory Services, 'Energy Retailers Association of Australia: Vulnerable Customer Protection Frameworks', December 2003.

From the businesses' perspective, energy retailing is an extremely low margin business. Indeed, it is difficult to think of another retail business that would involve lower margins. Energy retailing is also a high volume business that involves significant fixed costs.

Energy retailers are likely to compete in a number of different ways and on a number of different levels. Only some of this will be the most "obvious" form of competition, seeking to win new customers by offering lower prices. Indeed, the capacity to compete on price is heavily constrained by the price reductions that most customers need to consider when switching, and the retailers' capacity to deliver those price reductions, given the costs that are under their control. The level of switching is therefore a narrow and potentially misleading measure of competitive activity.

International experience

In all countries where FRC has been introduced (except NZ) it has been introduced with price regulation. The direct relevance of these markets to the removal of price regulation is therefore limited, other than to highlight that price regulation, if applied poorly, can distort market activity.

There would, however, appear to be a reasonably strong correlation between switching rates from incumbent retailers and the price reductions offered in markets that are both not price regulated and are price regulated. This implies that if price regulation limits the capacity of retailers to offer significant price reductions, competition will be distorted.

In other words, absent price regulation incumbent retailers will make a judgement about the extent to which they are prepared to have their price diverge from those of their competitors, but risk losing some customers. In the UK, incumbents have been willing to maintain roughly a 10% differential with their competitors, but have lost significant market share in the process. This price differential has been similar both before prices were deregulated and afterward. This implies that the regulated prices were set truly at "safety net" levels.

NZ is the only country that we are aware of that introduced FRC without any form of price regulation. The NZ experience is nevertheless similar to that of the UK. NZ incumbent retailers have been less prepared to allow prices to diverge to the same extent as they have in the UK. As a result, the price differentials have been smaller and the switching rates have been correspondingly lower.

The NZ and UK experience demonstrates that, in those countries, competition has been effective in limiting the capacity of incumbent retailers to raise prices. Moreover, in NZ, competition was apparently effective immediately. It is not obvious why NZ would be unique in this regard.

Distortions

Australia's retail energy markets currently operate within a highly regulated context that is creating a significant number of distortions. The most important of these is price regulation itself.

Price regulation, except where it is set at true safety net levels, can only distort market activity. Those distortions are likely to be producing outcomes that are not in customers' interests (eg. offers that are less focussed on price and more confusing than they otherwise would be). Despite the obvious conclusion that governments might draw in these circumstances (ie. that competition is not effective), the converse is actually more accurate. It illustrates the market trying to find solutions, but under artificial constraints.

Assessing the effectiveness of competition

In our view, it should not be necessary to develop criteria on which to assess the effectiveness of retail energy competition. It should be assessed in the same way as it is in any other market (i.e. via the Trade Practises Act).

If, however, policy makers are going to persist with this approach, retailers should do two things before being drawn into the debate:

- Demonstrate the logical and practical flaws in the approach; and
- Demonstrate what the process is really about (i.e. about competition being effective, rather than not being effective enough).

If, however, retailers find that participating in the debate is unavoidable then they should seek to ensure that assessments of the effectiveness of competition are undertaken according to the principles outlined below.

- Regulators should rely only on objective market evidence to ensure that they are applying tests consistent with effectively competitive markets.
- The only objective market evidence that is available on the conduct of the retail energy market comes from other similar markets. The markets that should be used to assess the performance of the energy market should share its key features (i.e. be a consumer service market) with a comparable:
 - Degree of market penetration;
 - Amount of average weekly expenditure;
 - Net margin; and
 - Make-up of fixed and variable costs.

Similar markets are likely to include retail energy markets in other countries and the markets for telephone, insurance and banking services.

Regulators should focus on evidence of rivalrous market processes and activity (and not outcomes) that is consistent with the conduct observed in similar markets. In particular, the energy markets should show similar:

- Degrees of awareness amongst customers that they have a choice;

- Degrees of understanding amongst customers regarding how they can exercise that choice; and
- Ranges and degrees of marketing activity of all types (i.e. not just price competition).

Regulators should not be seeking to determine what that rivalrous behaviour should be, just that it exists and it is of a comparable magnitude to that observed in other similar markets.

Where the assessment involves a market that is subject to price regulation, then expectations on the range and degree of activity should reflect the constraints that regulation may place on retailers' ability to compete on price. Evidence should be drawn from similar markets that are also price regulated or were until recently price regulated.

Tests to apply in assessing the effectiveness of competition

In our view there are only three key issues that need to be addressed if the effectiveness of retail competition is going to be assessed, given that a decision has already been made that retail energy services is a potentially competitive market. The three issues are that:

- Customers are aware that they have a choice;
- Customers know how to exercise choice and it is easy to do; and
- Choices (i.e. offers) are being made available to them.

However, given the political realities of the situation, it is unlikely regulators, governments and consumer groups would find these issues sufficient. Other issues are therefore likely to be addressed regardless of the merits.

Table 1 below provides a summary of the minimum tests that might be necessary to assess the competitiveness of retail energy markets, how they could be measured and the caveats that need to be applied to them.

It should be noted that these criteria go well beyond those applied in most markets and effectively represent a concession to the "newness" of retail competition, a concession we are not convinced should be made. Where estimates of possible hurdle rates in relation to the effectiveness of competition are provided on the criteria, they are indicative only. Whether they would be acceptable in particular circumstances is open to question. In other words, it is unlikely that they can be viewed in isolation, as the regulators' approaches show.

The tests are based partly on the indicators that were applied in the UK, as described in Section 7.1 (see Table 7). For example, at the time of price deregulation in the UK:

- Eighty six percent of gas and electricity customers were satisfied with the service they were receiving from their retailer. Implicit in this is a very high level of awareness that choice exists;
- Forty percent of customers said they found comparing prices "easy" and 35% found it "difficult". Ninety percent of people who had switched found it "easy";

- Sixty percent of customers reported receiving a visit from a doorstep sales agent and 33% reported receiving a leaflet through the door. A wide variety of offers were being made to a wide variety of customer groups. Many offered significant price reductions and other services; and
- Thirty seven percent of gas and 38% of electricity customers reported switching at least once, although this occurred in circumstances where wholesale energy prices were falling making it easier to create headroom. Switching rates were similar amongst all customer groups.

Lessons from the UK in relation to assessing the effectiveness of competition

The key lessons from the UK experience are that:

- The tests applied on the effectiveness of competition were highly subjective. The subjectivity of the tests is illustrated by the fact that the Regulator did not deem retail competition was “effective” when deregulating prices. Instead, the Regulator drew the conclusion that price regulation “*would be more harmful than helpful*”; and
- The way prices were regulated (different prices for customer groups) and the process of deregulation suggests that the objective was as much about managing outcomes for particular customer groups as it was about managing any market power.

These findings are consistent with those made in the Australian context. However, the UK experience needs to be viewed in context. In particular, the UK experience might create unrealistic expectations on the level of switching that might be expected in other markets. This is because the level of switching is high compared to switching rates in other retail energy markets and in similar products, as identified in the research conducted by the UK Department of Trade and Industry (“DTI”) (as is discussed in Section 6.1.5). The high switching rates in the UK retail energy market may therefore partly be a function of the enthusiasm of the UK energy regulator (“Ofgem”) in encouraging the development of competition.

The UK experience also provides anecdotal support for the notion that it takes some time for competition to develop or, more accurately, for customers to respond to its introduction.

UK price deregulation occurred in highly favourable circumstances, including:

- It occurred in an environment of falling wholesale energy prices, so it was easier to create ‘headroom’;
- Regulated prices were set to reflect the costs of serving particular customer groups and many vulnerable customers were already on prepayment meters;
- The Regulator appeared to be in full control of the process (i.e. it did not have to make recommendations to the Government);

- The Regulator appears to have been committed to deregulating prices as soon as it was practical, and has been proactive in promoting competition to create the circumstances to justify deregulation; and
- The process started with a large number of electricity retailers of similar size.

UK price deregulation occurred in about three years despite the existence of a more powerful “fuel poverty” consumer lobby than exists in Australia.³ Moreover, the evidence suggests that the decision to remove price regulation was not popular with the fuel poverty lobby.

³ The UK fuel poverty lobby is more powerful partly due to the climate and the condition of the housing stock.

Table 1: Criteria that may be used for assessing the effectiveness of competition

| <i>Effectiveness</i> | <i>Indicative measure</i> | <i>Comments</i> |
|--|--|--|
| <i>Awareness</i> – customers know they have a choice | Proportion of customers (currently protected by price regulation) who know that they have a choice. Estimated by survey. | <ul style="list-style-type: none"> - Implicit in most markets. Relevant to retail energy market because choice is new. - In most markets, awareness would be very high. Implies very high awareness would be needed in retail market (eg. 90% plus). Slightly lower figures might be acceptable (e.g.80%) but only if those who are unaware are not from particular customer groups. - Complicated by price regulation if it means that some customers are not receiving offers. |
| <i>Understanding</i> – customers know how to make choice | Proportion of customers that know how to exercise choice, or know how to find out. Estimated by survey. | <ul style="list-style-type: none"> - All of the above comments are relevant here. - Similar levels of understanding and knowledge would be required. It is possible that lower levels of understanding on how to exercise choice might be acceptable (eg. 60% plus), if knowledge of how to find out is very high (eg. 80% plus). |
| <i>Simplicity</i> – customers perceptions on comparing offers and switching | The proportion of customers reporting that it is “easy” or “quite easy” to compare offers and switch. Estimated by survey. | <ul style="list-style-type: none"> - Ease of switching is driven by supply side, so is not about competition <i>per se</i>. - But this test is as much about customer perceptions as it is about reality. - Relevant to retail energy market because choice is new, and policy makers will want to see retailers making it easy for customers to exercise choice. - However, similar markets do not necessarily make it easy to compare offers or switch. - There is a need to educate policy makers on the application of this test. - Complicated by price regulation if it leads to less price competition. |
| <i>Offers</i> – retailers are actively seeking to win customers through a variety of offers. | Proportion of customers getting offers. The proportion of customers in particular market segments getting offers. The range and types of offers being provided. Measured by survey and retailer information. | <ul style="list-style-type: none"> - In most markets customers are receiving offers or are being encouraged to contact alternative suppliers to see what offers they can make. - It would be reasonable to expect that a majority of customers across customer groups had received a targeted offer over the preceding year. - Policy makers will want to see certain types of activity (i.e. price competition) and may therefore make value judgements on the range and type of offers. - There is a need to educate policy makers on the application of this test. - Complicated by price regulation if it constrains ability to make attractive offers. |
| <i>Switching</i> – number of customers who are accepting competitive offers | Proportion of customers who are switching either to other retailers or to market contracts with existing retailers. Measured by market information. | <ul style="list-style-type: none"> - Switching rates in similar markets vary substantially so this is a potentially misleading measure of competition. UK switching rates set a difficult precedent. - Relevant to retail energy market because choice is new, and policy makers may want to see some switching as concrete evidence of competitive activity. - Switching by a significant minority of customers might be needed to “prove” the market is working. - Complicated by price regulation if it constrains ability to make attractive offers. |

Table 1 highlights instances where we think there is a need to educate policy makers on the application of the tests. This is particularly true where the measures might be complicated by the presence of price regulation. In these circumstances, the application of the test needs to be viewed in the context of the distortions that can be created by price regulation. The only practical way to shed light on this issue is by highlighting the conclusions that have been drawn from other (similar) markets that have been price regulated. However, opinions on the value of this are likely to vary widely because policy makers are likely to assume that retail prices are “right” (i.e. set at non-distorting levels).

2 Introduction

2.1 Background

Full retail competition has been introduced in a number of jurisdictions as part of the broader energy sector reform process. It has been introduced because effective competition is generally the best means of serving customers' interests.

The Energy Retailers Association of Australia's ("ERAA") objective is to ensure that Australia's retail energy markets ("energy markets") are able to operate freely and are not subject to unnecessary regulation. The implication is that, where competition has been introduced, the ERAA would like retail price regulation ("price regulation") removed.

2.2 Project task

The ERAA engaged KPMG to assist it in identifying the role that competition and effective customer protection frameworks could play in facilitating retail price deregulation. The key objectives of the study as outlined in the Terms of Reference ("ToR") were to examine the:

- Issues associated with the achievement of effective competition in Australia's retail energy market;
- Link between effective competition and retail price regulation; and
- Link between effective competition, retail price regulation and vulnerable customer protection frameworks.

2.3 Work program

To complete this project we have undertaken two work streams (competition and customer protection) with three phases of work (planning, interviews and research).

The planning phase included developing the approach to stakeholders and a retail information request (at the ERAA's request). The interview phase involved consulting with stakeholders (eg. public servants, regulators, consumer groups) identified by the ERAA. The research phase involved desk research on the key issues identified in the ERAA's ToR.

2.4 Structure of the report

The remainder of this report is structured as follows:

- Section 3 examines the current situation and political environment regarding price regulation;
- Section 4 outlines the stakeholder consultation process and outcomes;

- Section 5 examines the rationale for price regulation and the link to the effectiveness of competition;
- Section 6 describes the nature of retail energy services;
- Section 7 outlines the most relevant international experience; and
- Section 8 examines the distortions within the Australian retail energy market.

There are also three appendices. Appendix A identifies the stakeholders consulted in the study. Appendix B outlines the current situation in regard to competition and price regulation. Appendix C describes the type of price regulation that is currently in place.

2.5 Disclaimer

Please note that, in accordance with our Firm's policy, we are obliged to advise that neither the firm nor any member nor employee undertakes responsibility in any way whatsoever to any person or organisation (other than the Energy Retailers Association of Australia) in respect of information set out in this report, including any errors or omissions therein, arising through negligence or otherwise howsoever caused.

3 **Situation review**

This section briefly outlines the situation in regard to:

- Retail competition and price regulation;
- The broader policy making environment; and
- Identifies the implications for the ERAA's objective.

3.1 **Retail competition and price regulation**

The impetus for introducing competition in retail energy markets occurred within the context of a broader policy of competition reform. The reform stimulus largely came from the 1993 National Competition Policy Review ('the Hilmer Report')⁴ and an agreement in 1994 between the Council of Australian Governments ("CoAG") - the National Competition Policy.

The Hilmer Report argued that Australia had no choice, but to improve the productivity and international competitiveness of its firms and institutions so that they would become more efficient, more innovative and flexible. Competition was seen to have a key role in meeting this challenge, offering a promise of lower prices, improved choice for consumers, greater efficiency, higher economic growth and increased employment opportunities for the economy as a whole.

It was estimated that the reforms identified in the Hilmer Report and some related reforms had the potential to generate a \$23 billion, or 5.5 per cent, increase in national GDP.⁵ It was envisaged that about half of this could be generated from utility reform.

As part of National Competition Policy, the jurisdictions agreed to introduce competition into contestable parts of the energy sector and remove legislative restrictions on competition.

Table 2 summarises the current position with respect to competition and price regulation for each jurisdiction in the National Energy Market ("NEM").⁶ The situation is summarised in more detail in Appendix B and C.

⁴ Independent Committee of Inquiry, 'National Competition Policy', August 1993.

⁵ Industry Commission, 'The Growth and Revenue Implications of Hilmer and Related Reforms', March 1995.

⁶ Tasmania intends to join the NEM closer to the commissioning of BassLink, which is expected to occur in 2005.

Table 2: Current position regarding full retail competition and price regulation

| <i>Jurisdiction</i> | <i>Electricity</i> | <i>Gas</i> | <i>Price regulation</i> |
|---------------------|-------------------------------------|------------------------|---|
| Queensland | Not planned | Not planned | N/A |
| NSW | Started 1 January 2002 | Started 1 January 2002 | No plan to remove, set to 2007 |
| ACT | Started 1 July 2003 | Started 1 January 2002 | No plan to remove, set to July 2006/04 ⁷ |
| Victoria | Started 13 January 2002 | Started 1 October 2002 | No plan to remove, set to 2005 |
| SA | Started 1 January 2003 | Planned for mid 2004 | No plan to remove, set to 2004 ⁸ |
| Tasmania | Planned for after 2010 ⁹ | Not planned | N/A |

In October 2003 the Queensland Energy Minister told Parliament that the State faces a \$36.5 million penalty for failing to introduce retail competition into its electricity market. He stated, however, that the Queensland Government remained “*adamantly opposed*” to extending competition to all electricity customers.¹⁰

3.2 The broader policy environment

While no additional policy instruments are necessary to require the jurisdictions to introduce competition, it is apparent that the energy reform process has stalled somewhat in more recent times. It is also worth noting that Australia is by no means unique in this regard, which suggests it is being driven to some degree by global trends and events.¹¹

The Parer Report

The Parer Report highlights the degree to which the energy reform process has stalled and provides some indication of the priority areas for further reform.¹² It highlighted that, while substantial progress with energy reform has been made, “*serious deficiencies*” remain in

⁷ For electricity and gas respectively.

⁸ Electricity only. Once gas competition starts, it is expected to follow a similar approach.

⁹ Tasmania expects to introduce retail competition for domestic customers around 2010, subject to a cost benefit analysis. Technically no barrier exists to gas competition but reticulated gas is not yet widely available.

¹⁰ Electricity Supply Newsletter, ‘Qld faces \$36.5 million ‘fine’ over FRC decision’, No 286, 20 October 2003.

¹¹ ESAA, ‘Pause to reflect on reform is global’, Electricity Supply Newsletter, No. 287, 27 October 2003.

¹² Council of Australian Governments Energy Market Review, ‘Towards a truly national and efficient energy market’, Commonwealth of Australia, December 2002.

some areas. The Parer Report concluded: “important steps need to be taken to achieve a truly national and efficient energy market.”

The Parer Report identified eight “serious energy market deficiencies”. Moreover, it focussed on improving transmission interconnection investment decisions, as a way of facilitating the effectiveness and improving the depth of competition in the wholesale electricity market.

While the Parer Report did not identify the introduction of retail competition and deregulation of retail prices as one of the eight most serious market deficiencies, it did recommend that:

“Full retail contestability should be adopted and implemented by all jurisdictions including the removal of price capping arrangements and other measures that impede the entry of new retail competitors as soon as practicable, but in any event within the next three years.”¹³

The serious deficiency identified that is of most relevance to the retail energy market, is the impediments to more demand side activity. As a consequence, the Parer Report recommended that the installation of interval meters should be mandated for all consumers with the installation program to be achieved over the next 5 to 10 years.

Security of supply and investment issues

Separately, serious questions have emerged on the way in which regulators are implementing economic regulation at the network level. Such questions have been raised in the:

- Productivity Commission’s (“PC”) Report on the National Access Regime¹⁴ - the thrust of which has been endorsed by the Commonwealth Government in its interim response;¹⁵
- Western Australian Supreme Court decision in Epic Energy’s appeal against the Gas Access Regulator of Western Australia’s draft determination on the Dampier to Bunbury Natural Gas Pipeline (“the Epic decision”);¹⁶ and
- The sheer volume of litigation that is occurring.

The common theme is the impact the regulators’ approach is having on the incentive to invest and improve efficiency. In particular, the PC identified as a “threshold issue, the need

¹³ Council of Australian Governments Energy Market Review, ‘Towards a truly national and efficient energy market’, Commonwealth of Australia, December 2002, recommendation 6.3. This was one of 55 key recommendations made in the Parer Report.

¹⁴ Productivity Commission, ‘Review of the National Access Regime’, Report No. 17, 28 September 2001.

¹⁵ The Commonwealth Government, ‘Government Response to Productivity Commission Report on the Review of the National Access Regime’, Interim Response, 28 September 2001.

¹⁶ *Re Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd* [2002] WASCA 231, para. 124.

*for the application of the regime to give proper regard to investment issues” and “the need to provide appropriate incentives for investment.”*¹⁷ The Government responded by proposing to make changes to the TPA which “endorse the thrust” of the PC’s recommendations.¹⁸ It also released the PC’s review of the Gas Access Regime in December 2003 where similar recommendations were made.¹⁹

Regulators are therefore under some pressure to demonstrate that they are doing something to address these concerns.

The importance of the infrastructure investment issue, in particular, has been heightened in more recent times by the security of supply events in North East America, London, Scandinavia and Italy (and to a lesser extent Sydney). For example, the costs of the American blackouts have been estimated at up to \$45.5 billion in lost production.²⁰ Meanwhile, the Electric Power Research Institute estimates that, on average, every day perhaps half a million Americans can lose power for over two hours – costing the American economy \$140 billion a year.²¹

Ministerial Council on Energy

The Commonwealth Government and the jurisdictions have recently been attempting to restart the reform process via the Ministerial Council on Energy (“MCE”). In June 2003, the Council agreed that it would report to CoAG that further reform be undertaken in five key areas, of which one related to retail competition. On this issue, the MCE stated that further reform should be undertaken to:

*“Enhance the participation of energy users in the markets, including through demand side management and the further introduction of retail competition, to increase the value of energy services to households and business.”*²²

It also proposed a process to develop a national regulatory framework for distribution and retailing, which is to commence in 2004. In August the MCE agreed to implement this objective in 2006 through the creation of an Australian Energy Regulator (“AER”).²³ However, its role will specifically exclude retail pricing:

¹⁷ Productivity Commission, ‘Review of the National Access Regime’, Report No. 17, 28 September 2001, page xxii.

¹⁸ The Commonwealth Government, ‘Government Response to Productivity Commission Report on the Review of the National Access Regime’, Interim Response, 28 September 2001, page 1.

¹⁹ Productivity Commission, ‘Review of the Gas Access Regime’, Draft Report, December 2003.

²⁰ Australian Financial Review, ‘Blackout could cost \$45.5 billion’, 18 August 2003, page 12. All figures in this report are in Australian dollars, unless otherwise stated.

²¹ The Economist, ‘Like a candle in the wind’, 4th October 2003, page 60.

²² Ministerial Council on Energy, Communique, Sydney, 13 June 2003, page 1.

²³ Ministerial Council on Energy, Communique, Sydney, 1 August 2003.

“The extent of transfers of regulatory functions, other than retail pricing, to the AER in 2006 to be considered by CoAG.”²⁴

Since that time little progress has been made. For example, other issues (e.g. health) swamped the energy reform agenda at the recent Heads’ of Australian Governments meeting.

3.3 Implications

The current broader policy-making environment would appear to have the following implications for the ERAA’s objective:

- There is no need for new policy initiatives or commitments to complete retail competition;
- There is, however, a need for political will to make it happen;
- The energy reform process has stalled in more recent times;
- Businesses that want to pursue deregulatory reforms are going to have to work harder or more creatively than they have had to in the recent past to get them implemented;
- Where the impetus for reform remains at the federal level it is quite focussed on the wholesale market. A number of other arguably “more important” issues on the energy reform agenda seem likely to take precedence over retail issues (eg. wholesale market, interconnection and network investment issues). Some of these issues have recently acquired even more importance due to security of supply events;
- The focus at the federal level is evident from the context in which retail competition is currently viewed; in other words, as part of the demand side management and national consistency of regulation issues; and
- Retail pricing is explicitly being left to the jurisdictions and there is a risk that it has already been and might continue to be “horse-traded” to achieve other policy objectives.

In our view, the problems with energy market reform go deeper than the official activity would suggest, although there appears to be a real impetus to do something in relation to wholesale electricity. Increasingly, some governments appear to be realising that they can shift responsibility for the operation of the energy industry to third parties, but that they cannot necessarily shift accountability for the outcomes. This is increasing the pressure on politicians to seek to reassert some control.

²⁴ Ministerial Council on Energy, Communique, Sydney, 1 August 2003, page 2.

4 Stakeholder analysis

This section outlines the:

- Stakeholder consultation process we undertook;
- Outcomes of our analysis.

This section is only intended to provide a brief overview, as the outcomes of the stakeholder consultation process underpin the entire report and our findings.

4.1 The stakeholder consultation process

The consultation process involved consulting with stakeholders identified by the ERAA (as listed in Appendix A).

The stakeholders consulted fall into four main categories: public servants; regulators; ombudsmen and consumer groups. The interviews generally lasted between 1-2 hours. “Questionnaires” were developed for each group to help guide the discussion, but in practice a very flexible approach was used. In most cases, we committed to “Chatham House” rules (i.e. not attributing anything said during the meeting to particular groups thereafter), which was necessary to encourage discussion, particularly with public servants. A number of parties expressed an interest and/or expectation in seeing the outcomes of the process. Five stakeholders were not prepared to meet, but two of them responded in writing.

The analysis and findings in this report are based on our qualitative assessment of the input of these stakeholders gained from the:

- Interview process;
- Analysis of some written material prepared by these stakeholders; and
- Our working knowledge of the energy sector.

We have not, as a part of this project, specifically reviewed these stakeholders’ communications on all the relevant issues in all the relevant forums.

Government

We were not asked to talk to politicians or their political advisers as a part of this project. We did consult with public servants both at federal and state level (as discussed below). The views expressed here are based on our consultations with public servants. Normally the process involved getting public servants to explain the official position and the reasons for it (i.e. their government’s position), and then their views as individuals. This was not always completely successful (i.e. a few refused to provide any useful insight on their views).

State governments are clearly the most important stakeholders in relation to the ERAA's objective because they will be held accountable for the outcome of any decision to remove price regulation.

The primary interest of State governments appears to be to avoid political issues emerging as a result of a decision to remove price regulation and, within that constraint, to implement good public policy. To the extent that they perceive this objective cannot be achieved, they are unlikely to be supportive of price deregulation. Our review suggests that, in general, governments are concerned that this objective cannot be achieved without undue political pain.

The Federal Government's key interests would appear to arise from its position as an energy sector reformer, particularly of the wholesale energy market. It is in a position to place some pressure on State governments, but its incentive to do this will depend on its objectives.

Related to the Federal Government are "market reformers" (eg. the National Competition Council "NCC"), whose interests are self-evident.

Public servants

State public servants have two key interests in this issue:

- Implementation of good public policy; and
- Assisting their governments avoid 'trouble'.

In our consultations, almost all expressed the view that completing the retail energy reforms was consistent with good public policy and expressed very supportive personal views. Some acknowledged that the challenges associated with price deregulation were primarily political and not economic. They are, however, acutely aware of the political issues retail price deregulation could create.

Federal public servants have the luxury of not having the second objective placed on them in relation to price regulation (i.e. to assist their government avoid trouble). They therefore have a simple interest in getting good public policy implemented.

Regulators

Regulators would appear to have two key interests in the issue:

- Assisting governments to implement good public policy; and
- Ensuring that they are able to undertake the tasks they are given to do.

In our consultations, some expressed the view that completing the retail energy reforms was consistent with good public policy. Most also understood the risks that the price regulation

process entailed for them. Most, however, had significant concerns with how effective the market would be in the absence of price regulation, particularly for vulnerable customers.

Ombudsmen

Ombudsmen's primary interest in the issue would appear to be that industry meets its standards in relation to vulnerable customers regardless of the approach taken to retail competition. Most saw themselves as champions of consumer rights (and are aware of the pressure they can put on the industry). Most had significant concerns with how effective the market would be in the absence of price regulation, particularly for vulnerable customers.

Ombudsmen are important to the Government's decision-making process, although the connection between price regulation and vulnerable customer protection is somewhat tenuous.

Consumer groups

The term consumer group captures a diverse range of groups. In a practical sense they range from:

- Those involved in the provision of services either to:
 - Low income households generally; or
 - Emergency relief to vulnerable customers in particular;
- To those that are more involved with advocacy for:
 - Customers generally; or
 - Vulnerable customers in particular.

In a philosophical sense, consumer groups can range from those that are ideologically opposed to private provision particularly for essential services ("group A"), to those that are more interested in ensuring that, regardless of the model of service provision provided, the needs of vulnerable customers are addressed ("group B"). Our consultations suggest those involved in advocacy tend to be more ideologically driven than those involved in service provision, but this is only an observation across a relatively small sample.

It is worth noting that the interests of group A have almost nothing to do with retail energy competition *per se*, as their motivation is primarily political. The interests of group B also have little to do with retail energy competition *per se* because they are primarily interested in the outcomes for their constituents. In policy debates the latter group tends to rely on the former group. The most obvious example of this is the divergence in views in relation to prepayment meters.

This situation is reasonably uniform across the jurisdictions, although Victoria appears to have a disproportionate number of consumer groups that are interested in energy and are of a more ideological persuasion.

It would be fair to say, however, that most consumer groups, regardless of their persuasion, are concerned about the provision of essential services by private enterprise, and therefore highly sceptical of the benefits of retail competition for domestic customers in general and vulnerable domestic customers in particular. As a consequence, they are generally sceptical of price deregulation and measure the “success” of it on the basis of whether prices will go down for their constituents.

The exceptions that did express a willingness to contemplate the removal of price regulation were generally looking for major “compensation”. This would involve a more transparent and committed approach by businesses to vulnerable customers and a more holistic approach to the problem (eg. attacking it at source via improving the efficiency of the building stock). In some instances, it was therefore somewhat difficult to take their “support” at face value.

5 The rationale for price regulation

This section examines the rationale for removing price regulation. In particular, it examines the link between price regulation and effective competition.

5.1 Introduction

Where Australian jurisdictions have introduced competition, they have, without exception, continued to regulate retail prices. This is consistent with the international experience, with the notable exception of New Zealand (NZ).

Australian jurisdictional governments have typically publicly argued that price regulation is necessary because their retail energy markets are not yet “*effectively competitive*”. They have also argued that price regulation will continue until the markets are effectively competitive. Economic regulators have the role of setting regulated prices and assessing whether the markets are effectively competitive.

Linking price regulation to effective competition presents the retail energy industry with a major challenge because it:

- Reverses the burden of proof;
- Reverses the burden of proof on a complex issue, particularly for retail energy markets; and
- Forges a disingenuous causation between effective competition and retail price regulation that is almost the exact opposite of the real causation.

5.2 Reversing the burden of proof

Typically it is presumed that potentially competitive markets are effectively competitive, and that this provides the most effective form of customer protection available. This presumption is based both on economic theory and a wealth of experience of the success of competitive markets in effectively and efficiently delivering most of the goods and services consumers want.

In simple terms, economic theory suggests that there are only three conditions under which markets fail to maximise efficiency: public goods, externalities and natural monopoly.²⁵ Public goods are products whose production costs are indivisible and whose consumption is difficult to charge for. Externalities arise where the costs of consuming a good are not reflected in this price. Natural monopoly occurs in situations where the costs of production exhibit falling long run average costs. It should be noted, however, that economic theory has

²⁵ See Johnson, B., ‘Back to Basics: Searching for Principles to Guide the Energy Conservation Policy Debate’, Energy Modelling Forum, Stanford University, November 1992.

little to say about equity, which is a common justification provided by governments for market intervention.

Competition has been introduced into retail energy markets because governments took a view (in the mid 1990s) that retail energy markets suffer from none of these conditions.

The general presumption in favour of markets is so strong that competition law generally places the burden of proof on identifying behaviour or circumstances, which demonstrate that a market might be or become less than effectively competitive, rather than the other way around.²⁶ For example, it is understood that in 2002 the ACCC indicated to TXU that it might prohibit it from acquiring Pulse.²⁷ The ACCC's Merger Guidelines indicate that it will generally want to give consideration to mergers that provide the new entity with more than 40% of the relevant market.²⁸ And last year, the Australian Labor Party was proposing to reverse the burden of proof in relation to petrol pricing:

*"Opposition assistant treasury spokesman Mark Latham said Labor would also overhaul the Trade Practices Act to reverse the onus of proof so oil companies would have to show that they had not boosted prices during holidays."*²⁹

The governments' current approach means that the direct opposite is being applied to retail energy markets. It is being presumed that retail energy markets are not effectively competitive until it can be proven that they are.

5.3 Reversing the burden of proof on a complex issue

In principle, reversing the burden of proof might seem somewhat unfair, but of limited importance. However, the governments' approach reverses the burden of proof on a complex issue, particularly for retail energy markets. It is a complex issue because of the difficulty in defining what effective competition means both in theory and in practice. It is a particularly complex issue for retail energy markets because of the markets' circumstances.

5.3.1 Defining effective competition

Defining effective competition is a major challenge both in theory and practice. A full examination of these issues is well beyond the scope of this paper. Instead, we merely seek to highlight the implications for the ERAA's objective.

²⁶ The 'failure' of the market in these circumstances is expressed in terms of "substantial" market power or lessening of competition. The Herfindahl-Hersham Index, which assesses market concentration, is often used to assist in identifying circumstances where market power might arise (eg. where a merger is proposed).

²⁷ The press suggested that TXU did not make a bid for Pulse, after the ACCC blocked an outright bid. See Australian Financial Review, 'Taking Pulse', 28 June 2002, page 32.

²⁸ ACCC, Merger Guidelines, June 1999.

²⁹ The Age, 'Labor bid to curb petrol prices', 1 April 2002, page 2.

The recent debate that has occurred in Australia on effective competition is the best way of illustrating the difficulty in defining what it means.

The concept of effective or workable competition dates to a 1940 article by J M Clark.³⁰ The ACCC recently made this point in its submission to the Productivity Commission on the review of the national access regime:

*“By 1940 it was widely recognised that very few industries met the theoretical conditions for perfect competition. But, at the same time, this did not automatically imply that in the majority of industries the outcomes were sufficiently undesirable as to demand some form of government intervention. Rather, it seemed that there was a wide range of industries for which the outcomes were broadly acceptable.”*³¹

The effective competition concept forms the basis of the framework governing competition policy (i.e. the *Trade Practices Act 1974* “TPA”).³² It was also recognized in the Hilmer Report and in the creation of a legal regime to provide the terms and conditions under which access to ‘essential’ facilities would be granted (eg. the National Access Regime in Part IIIA of the TPA, and the national electricity and gas codes). The emphasis on effective competition in the Hilmer Report is unsurprising, but it is important.

It is unsurprising because the Hilmer Report, in practical terms, could hardly be about anything else. It is important - or, more accurately, it has subsequently become important - because utility regulators have largely used a completely different concept of competition (i.e. perfect competition) in making their decisions. As the WA Supreme Court’s recent *Epic* decision notes:

*“it would be surprising if what was contemplated was a theoretical concept of perfect competition, as the subject matter involves very real-life commercial situations.”*³³

³⁰ Clark, J. M., ‘Towards a concept of workable competition’, *American Economic Review*, 30, pages 241-256. The term workable competition predates the term effective competition but both are used interchangeably in common usage. See ACCC, ‘ACCC Submission to the Trade Practices Review’, June 2002, page 198. In this paper we use the latter term.

³¹ ACCC, ‘ACCC submission to Review of the Gas Access Regime: Attachment 1 On workable competition’, 26 August 2003, page 116. This paper was written in the context of network regulation but the general conclusion it draws regarding the definition and application of effective competition would appear to have wider significance because they go to some fundamental principles.

³² ACCC, ‘ACCC Submission to the Trade Practices Review’, June 2002, page 198. The ACCC state: *“In assessing conduct under the Act, the courts and the Trade Practices Tribunal have largely adopted this (workable competition) approach.”*

³³ *Re Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd* [2002] WASCA 231, para. 124. It goes on the note that *“Workable competition seems far more obviously to be what is contemplated. This is clearly consistent with the approach of the Hilmer Report and is the notion of competition that was explored in the Queensland Cooperative Milling Association Ltd case quoted above.”*

Regulators have, for reasons that are not entirely clear, been extremely reluctant to apply the effective competition concept to utility network regulation. That reluctance (and the difficulty in applying the concept) is illustrated in their subsequent efforts to “interpret” the *Epic* decision. According to the ACCC:

“The notion that regulatory decision-makers should seek to regulate in such a way as to replicate the outcomes of a competitive market is widespread but of limited practical usefulness.”³⁴

“Workable competition, like its cousin “effective competition”, is not a precise concept or a term of art but simply denotes that state of competition which yields broadly acceptable outcomes. However a very wide range of markets yield broadly acceptable outcomes. This conclusion alone provides virtually no guidance for the regulator.”³⁵

“There are many different competitive markets with quite different properties. The competitive markets principle does not assist the regulator to determine which outcomes of which markets it should emulate.”³⁶

Attempting to define what the structure, conduct or performance of the competitive process should be in any particular circumstances is therefore an extremely difficult task (which reflects the reason why markets are relied upon in the first place). The only objective information that is available relates to the types of industry structure, conduct and performance observed in other effectively competitive markets, but this is likely to be of limited practical value in any particular circumstances.

Effective competition implies “rivalrous” behaviour or the presence of constraints, but it is usually defined by the absence of such behaviour or constraints (reflecting the presence of substantial market power – eg. being able to raise prices without losing market share).

The High Court’s recent *Boral* judgement, which related to the alleged misuse of market power under section 46 of the TPA, further highlights the difficulty of defining the concept. According to the Australian Financial Review:

“The difficulty for both sides in this battle is that section 46 is not a clear piece of law. According to Clayton Utz competition law partner Michael Corrigan, this vagueness makes it difficult for businesses to be sure they are abiding by the competition rules. “It is probably the most difficult section of the Trade Practices Act to apply” he says.

Even more problematic is that the uncertainty is not just in the law. The economic principles on which section 46 is based are hazy too. Ergas says part of the problem is economists “don’t

³⁴ ACCC, ‘ACCC submission to Review of the Gas Access Regime, Attachment 1 On workable competition’, 26 August 2003, page 106.

³⁵ Ibid, page 115.

³⁶ Ibid, page 114.

have a terribly firm view of conduct which is anti-competitive". He compares the difficulty of trying to determine what is anti-competitive to society's efforts to decide a standard of decency.

At the two extremes – both of competition and decency – most people agree what is acceptable and what is not. But there is a large area in the middle where there is a legitimate difference of view."³⁷

Assessing, in a positive form, whether a market is effectively competitive is therefore likely to be a highly subjective and arbitrary exercise. Unfortunately, when outlining how they propose to assess the effectiveness of competition in retail energy markets regulators have shown little willingness to concede the limitations of the test they are applying.

5.3.2 Exacerbating the burden of proof

The governments' approach exacerbates the burden of proof on the retail energy market by requiring that the industry argue that it is efficient while it is subject to comprehensive regulation. It also raises the spectre of self-interest.

The industry is being asked to demonstrate that the market is effectively competitive, while it is subject to price regulation. It is not obvious how it is possible to demonstrate that or market it effectively if its capacity to utilise one of the main features on which competition is likely to occur is constrained. There is a substantial risk that price regulation ends up justifying itself in a self-perpetuating circle that allows no real objective evidence to be brought to bear on the issue.

Obliging the retail energy industry to argue that the market is competitive puts the industry in a difficult situation. It is very easy to paint an industry's claims that it wants to see a regulation removed as self-serving. For example, it is likely that some stakeholders will conclude that there is an inherent contradiction in retailers arguing for the removal of price regulation because the market is competitive. This is because wealth maximising businesses would presumably only argue this if they could generate more wealth in a world of deregulated prices than they could in a world of regulated prices. This can only be true for all retailers if unregulated prices were higher than regulated prices otherwise would be.

While this argument is likely to be in error, it has a simplistic appeal, which is often attractive.³⁸ This is similar to the argument sometimes used by regulators that if the regulated industry is not 'squealing', they must not be doing their job properly.

³⁷ Australian Financial Review, 'When competitive edge becomes a bleeding shame', 6 August 2003, page 52.

³⁸ Companies that succeed in competitive markets normally have to be focussed on the processes that will deliver success and generate wealth. Companies invest in their people and processes because they believe that their approach might provide them with a competitive edge and deliver these outcomes. That is typically why they argue for less regulated markets, even though the evidence suggests that most will fail to generate acceptable

Retailers arguing that retail energy markets are effectively competitive are unlikely to get a particularly fair hearing. Moreover, it is not obvious that any other parties have a strong interest in making the argument for the industry. Customers are unlikely to make the case because the beneficiaries of removing price regulation are unlikely to know who they are, and the benefits are likely to be spread widely and quite thinly.

5.4 The link between effective competition and price regulation

The Governments' approach forges a disingenuous causation between effective competition and retail price regulation. The causative link is apparently that the absence of effective competition leads to the need for price regulation. In other words, in the absence of both, retailers would exploit their market power by increasing prices above what they would be in the absence of the market power.

It is likely to be true that retailers with market power would earn monopoly rents in the absence of price regulation. The source and materiality of the market power retailers allegedly possess is, however, rarely identified nor assessed. However, there is a more important issue.

In practice, the real causation between effective competition and retail price regulation is almost the exact opposite of the alleged causation. The real concern is (or can reasonably be judged to be) that competition will be too effective, not that it will be ineffective. In other words, it will result in the unwinding of the cross subsidies that are typically embedded in regulated prices. It might therefore result in price rises for some or all customers.

This is best demonstrated by outlining the:

- Economic case for price regulation; and
- Evidence regarding the case that is made for retail price regulation.

5.4.1 The case for price regulation

We believe the economic case for regulating prices in potentially competitive markets is weak at best. There might, however, be a more pragmatic case for price regulation where there are significant "barriers" to a market functioning, although economic theory does not provide clear guidance on what might constitute market *barriers*.³⁹ In practice, however, virtually all markets operate within the context of regulation. Regulation creates barriers that restrict the operation of markets, often in unforeseen ways. Barriers created by regulation are often referred to as "institutional" barriers.

returns. Moreover, regulation creates its own risks that businesses cannot control, which is anathema to what their efforts to manage the process are about (ie. to control the variables that influence success).

³⁹ See for example Katz, M., Rosen, H., 'Microeconomics', Richard D Irwin Inc, 1991. Where barriers are discussed, it is within the context of barriers to entry.

Retail energy markets operate within a highly regulated context. This is because:

- The market did not evolve as a result of changing consumer needs or the advent of new technology (although this has clearly helped). Rather, retail energy markets were “created” by removing restrictions on competition;
- Of the sheer complexity of creating functioning markets in electricity and gas; and
- Of the concern about how this “new” market might work, given it involves what is regarded as an ‘essential service’.

Institutional barriers that restrict the operation of competitive markets might provide a justification for regulatory intervention in certain circumstances. In the first instance, however, removing the institutional barriers is likely to be the most appropriate response. Where this is not feasible, a secondary policy instrument might be necessary to address the issue. The costs and benefits of that secondary intervention should also be considered.

Such barriers might arise on the supply or demand side of the industry. On the supply side, these barriers might arise because the:

- Common information technology systems on which competition depends are not yet fully effective (eg. the B2B⁴⁰ systems); and/or
- Particular retailers’ information technology systems are not yet fully effective.

On the demand side, these barriers might arise because customers are, for whatever reason, not yet “ready” to make such choices.

Supply side

It is possible that where the *common systems* on which retail competition depends are not in place to enable competition to work effectively, an incumbent retailer might, in the absence of price regulation, be able to charge higher prices than otherwise would be the case.

We understand that there have been some significant teething problems with the retailers’ B2B systems, although we are not in a position to assess the magnitude of these problems. The perception amongst many stakeholders is that the problem has been widespread.

The obvious solution would be to delay the introduction of retail competition, but given the nature of the process this is not always feasible. These circumstances could therefore warrant the use of price regulation powers.

⁴⁰ B2B refers to business to business systems recording information about customers and their use of electricity or gas. They involve both retailers and distributors and are necessary to allow customers to transfer from one retailer to another.

The more important point is, however, that the capacity of common systems to facilitate competition has nothing to do with the effectiveness of competition *per se*.

It is also possible that an incumbent retailer who did not have its *own systems* in place to enable competition to work effectively, might be able to charge higher prices than would otherwise be the case. For example, Telstra has previously been accused of similar behaviour.⁴¹

This circumstance might also warrant the use of price regulation although in this case it is less obvious that price regulation would be the appropriate response.

It would be reasonable to assume that, if a retailer that was committed to the market and had undertaken all the necessary investment, it would have a strong incentive to ensure that all its systems worked effectively, if only because unreliable systems are likely to disrupt its activities as much as its competitors'. There may, however, be isolated parts of a retailer's systems that it could slow down to thwart competitors taking their customers. In this case, however, it is highly likely that other retailers would be quick to make this known to regulators, so there would appear to be significant countervailing power to ensure the situation is resolved.

Again, however, the capacity of a retailer's processes to facilitate competition has nothing to do with the effectiveness of competition *per se*.

Demand side

On the demand side, it is possible that customers might not be "ready" for retail competition and in the absence of price regulation, incumbent retailers might be able to charge higher prices than otherwise would be the case. For example, many customers may take time to learn about the market and understand the options that are available to them.

While price regulation could be used to avoid this problem, it is not obvious that price regulation would be the appropriate response because:

- It cannot solve the problem but only prolongs it; and
- The problem is not unique to retail energy markets.

To the extent that price regulation is successful in ensuring that customers can avoid making decisions on which retailer to use, it can only serve to perpetuate the problem. Price regulation perpetuates the problem by removing the incentive customers otherwise would face to make choices and protect their own interests. Price regulation is therefore not an

⁴¹ Professor Alan Fels (former head of the ACCC) writing in the Australian Financial Review, 'Telecom giant needs a leash', 7 February 2002, page 55. Fels accused Telstra of using the provisions in the access pricing process to delay the onset of competition. See also Chris Anderson (Optus CEO) writing in the Australian Financial Review, 'Hung up on Telstra's bad faith', 22 April 2002, page 63.

appropriate policy response in these circumstances. The more appropriate policy response would be to provide customers with the information they need to make informed choices.

In any case, the retail energy market is not unique in this respect. Indeed, customers are required to go through exactly the same process in other markets when they first enter them (eg. buying your first car, house, or other items that are only purchased irregularly). Rarely do governments advocate that we should regulate prices for new entrants in these markets.

The economic case for retail price regulation is therefore weak at best, excepting where the IT systems on which it depends are not able to allow the market to work effectively. This, however, has nothing to do with the effectiveness of competition *per se*.

5.4.2 The “real” reasons for price regulation

There is considerable evidence to suggest that the real objective of retail price regulation is to achieve government equity objectives. Price regulation does this by distorting the price signals that the market otherwise would provide. This is evident from:

- How competition works and what it typically achieves;
- Way in which price regulation is implemented; and
- The actions of regulators and governments.

The objectives of competition

The key objective of retail competition is to provide energy consumers with a choice of supplier. This choice is not being provided for its own sake. Rather it is being provided in the expectation that competitive process will lead to improvements in the efficiency with which retail services are provided and energy is priced. More importantly, these choices are being provided because improvements in the efficiency with which these services are provided and energy is priced, are expected to benefit consumers.

These improvements in efficiency can be expected to be of three main types:

- Productive efficiency - the ratio of outputs to inputs or how best to produce. Improvements in productive efficiency might be expected to emerge primarily in reducing the margin earned by retailers. Productive efficiency improvements might also result from improved energy purchasing practices by retailers;
- Allocative efficiency - deciding the most value added use of limited inputs or which outputs to produce. Improvements in allocative efficiency might be expected to emerge from the development of more cost-reflective pricing, and the impact this may have over time on the total cost of delivering energy, freeing up resources to devote to the provision (or consumption) of other services; and

- Dynamic efficiency is concerned with the continuous achievement of productive and allocative efficiencies over time. For example, this might be through the range of services energy retailers provide that customers value (eg. dual fuel billing).

Improvements in productive and dynamic efficiency can be expected to lower the cost and improve the range of services provided to all customers. Improvements in allocative efficiency can be expected, in the first instance, to change the relative prices that customers pay. In the second instance, improvements in allocative efficiency can be expected to benefit all customers by encouraging more efficient use of energy services.⁴²

The price changes associated with improvements in allocative efficiency could easily be larger, in the first instance, than the price reductions associated with improvements in productive and dynamic efficiency. There are three key reasons for this:

- Regulated prices tend to be set with social and other non-economic goals in mind and are therefore unlikely to be set as they would be in competitive environment;
- Price changes reflecting the extent to which existing prices are not sustainable in a competitive market are likely to be more immediate, because the market will “fix” them quickly (i.e. retailers are unlikely to offer loss making prices for long); and
- The price changes associated with improvements in allocative efficiency relate both to energy and retail costs, whereas the price reductions associated with improvements in productive efficiency relate primarily to retail costs.

In an effectively competitive retail market, retailers will set prices according to the customers’ willingness to pay. The customers’ willingness to pay will be a function of the offers that are made to it by competing retailers. Because the retailers are competing, their prices are likely to be reasonably cost reflective. Certain existing prices may be unsustainable from the retailers’ perspective, given the way in which their costs are incurred. In other words, existing prices are unlikely to be sustainable either where they are:

- Below the marginal cost incurred in serving a particular customer (who therefore must be subsidised by another customer); or
- Above the level at which another retailer is prepared to provide the service (which therefore exposes the retailer to the risk of losing that customer).

The implementation of price regulation

If the primary objective of retail price regulation really were about protecting customers from the general market power that retailers possess, then the most effective policy response would be to cap the average price they could charge to customers. This is because the market power would be expressed in higher average prices.

⁴² These improvements could relate both to improvements in customers’ usage of energy and in the propensity of customers to impose costs on retailers (eg. through the late payment of bills).

Regulating an average price would mean that retailers could not lift prices overall, but could change the mix of prices between customers. In practice (as is outlined in Appendix C), price regulation typically involves limits both on average prices and on the movement in particular prices. This suggests the concern extends much wider than market power. It extends to the impact of unwinding cross subsidies (i.e. the impact of effective competition).

The actions of regulators and governments

Regulators have been more forthcoming about the real objective of retail price regulation. For example, ESCOSA has argued:

“The introduction of full contestability to the retail electricity market was a policy decision implemented by successive South Australian Governments. Underpinning this policy decision is a view that it is the process of competition, rather than regulation, which can, ultimately, deliver maximum benefits to consumers through lower prices, better goods and services and increased efficiency. Competition, it is argued, provides these outcomes in a more expeditious and efficient manner than direct intervention into a market by a Government.

*However, what many who advocate the implementation of competition have historically ignored are the **distributional** (our emphasis), rather than aggregate, impacts that a move to a competitive market might have for the community.*

Many of the arguments put forward in favour of competition are couched in terms of benefits that accrue to the community as a whole. Implicit in statements such as these is the recognition that some sectors of the community may be worse off while at the same time others will be made better off, leading to an aggregate benefit, following the introduction of competition to a particular market.

While ESCOSA does not quibble with the view that in a fully or reasonably competitive market the competitive processes may bring benefits, it remains to be convinced that in practice the retail electricity markets will display sufficiently competitive characteristics to ensure that all members of the community benefit.

*Therefore, although not advocating intervention into a market as a general rule, a process of assessing the development of competition will allow ESCOSA to form views on the **distributional** (our emphasis) impacts of competition and consider the most appropriate means or response to rectify market failures or deficiencies to provide basic protection to those impacted negatively by the market.”⁴³*

⁴³ ESCOSA, ‘Monitoring the Development of Electricity Retail Competition in South Australia: Proposed Approach’, April 2003, pages 21-22. Moreover, given that ESCOSA’s primary objective is the “*protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services*”, it is not obvious how acting as an agent to redistribute wealth is consistent with this. Indeed, it is

IPART's recent issues paper states:

*"Extending choice and competition to all retail customers is predicated on the principle that an efficient, competitive market can deliver benefits for customers in terms of both price and quality of service. However, it will take time for retail competition to take full effect. In the meantime, some form of ongoing or transitional regulation is necessary to ensure that **vulnerable** (our emphasis) customers are not disadvantaged."*⁴⁴

IPART goes on to note that:

*"The legislative requirements for regulating electricity and gas default tariffs for small customers allow the Tribunal some flexibility in the form or regulation that it uses. Currently, many of the customers on regulated tariffs are paying prices that are lower than the costs to supply them gas and electricity. These customers are unlikely to choose to participate in the competitive market, as doing so would result in them paying prices that are higher than the cost to supply through 'over-recovering' tariffs. The Tribunal considers that the primary objective in setting the form of regulation for both sectors should be to move all regulated tariffs towards cost-reflective levels without exposing customers on under-recovering tariffs to unacceptable price shocks."*⁴⁵

In October 2003, the Queensland Energy Minister stated that the Queensland Government remained "*adamantly opposed*" to extending retail competition to all electricity customers because "*We are not going to sell out the people of the bush.*"⁴⁶

The fact that retail price regulation has little to do with the effectiveness of competition is also highlighted by the lack of economic justification for price regulation in the work undertaken by regulators. This compares rather starkly with the arguments they typically make in relation to the justification for network regulation.⁴⁷

For example, IPART mentions the need to consider the effectiveness or otherwise of competition so that it can determine the appropriate form of regulation and nature of regulated tariffs, but the paper does not discuss how this might be done.

Meanwhile, the ESC in Victoria formed a view on the competitiveness of the Victorian retail energy market before it conducted any reviews of the market. In its July 2001 report investigating the price increases proposed by several retailers for the latter part of 2001, the ESC simply concluded that:

typically assumed that the redistribution of wealth is likely to have some negative efficiency impacts and that the objective should be to achieve this with the minimum amount of distortion possible.

⁴⁴ IPART, 'Review of Gas and Electricity Regulated Retail Tariffs: Issues Paper', October 2003, page 4.

⁴⁵ Ibid., page 7.

⁴⁶ Electricity Supply Newsletter, 'Qld faces \$36.5 million 'fine' over FRC decision' No 286, 20 October 2003.

⁴⁷ See, for example, ACCC, 'ACCC submission to Review of the Gas Access Regime', 26 August 2003.

“During this transitional period, the local retailers will continue to possess a substantial degree of market power with respect to the small customer market segment which is expected to be eroded over time as the competitive activity between retailers takes hold and small customers begin to exercise informed choices in the contestable retail market.”⁴⁸

It is also evident that the rules the ESC and ESCOSA are adopting in assessing the competitiveness of the markets could hardly be described as objective and leave them with very wide discretion.

The ESC states:

“it is important to note the effectiveness of competition cannot be measured against a single set of indicators. In particular, the effectiveness of competition is likely to be influenced by a range of indicators covering market structure, conduct and performance all of which potentially impact on each other”⁴⁹

ESCOSA states:

“ESCOSA supports the view that it is important for the electricity retail competition indicators to be treated as a set, rather than rely on any one indicator, to demonstrate the level of effective competition existing at a point in time.”⁵⁰

“ESCOSA considers that it could be difficult to define the conditions necessary to enable the relaxation of price controls upfront, given the need to rely on a range of indicators and that given the qualitative nature of some of the indicators there will be the need for some subjective assessment.”⁵¹

The sentiments expressed by the ESC and by ESCOSA are similar to those expressed by the UK energy regulator (Ofgem) during its deliberations on the need for price regulation and the effectiveness of competition.

“As the development of competition is a dynamic process, characterised by constantly changing structures, behaviour and performance, the development of competition cannot be clearly measured against a simple set of indicators, e.g. market shares. It is important to consider the functioning of the domestic gas and electricity supply market in its entirety. The functioning of the market depends upon the combined effects of the actions of the incumbent, competitors and customers, as well as upon the structural conditions in which they all operate.”⁵²

⁴⁸ Office of the Regulator General, ‘Investigation into Proposed Increase in Electricity Retail Tariffs for Domestic and Small Business Customers by TXU Electricity Ltd’, July 2001, page 7.

⁴⁹ ESC, ‘Special Investigation: Review of the Effectiveness of Full Retail Competition for Electricity-Final Report’, September 2002, page 27.

⁵⁰ ESCOSA, ‘Monitoring the development of electricity retail competition in South Australia: Position paper’, August 2003, page 4.

⁵¹ Ibid., page 5.

⁵² Ofgem, ‘Domestic gas and electricity supply: Market survey 2000’, August 2000.

The focus on equity is also evident in the other ways governments have sought to address issues associated with the introduction of competition (eg. the use of special power payments in Victoria to graduate the unwinding of the urban rural cross subsidy).⁵³

Finally, even if it were true that retail price regulation was about avoiding the abuse of market power, then it assumes that regulators are going to be able to set regulated prices that distinguish between price changes that might be justified for economic reasons and price changes that might be a function of market power. This would seem to be at best an optimistic assumption. The Productivity Commission's recent position paper on the national access regime contains the following relevant comments:

“Transitory market power is a feature of virtually all markets. That is, new products or cost-saving innovations will give their owners an advantage over competitors and allow them temporarily to earn above normal profits. However, the competitive responses of rival firms will typically see that market power eroded... Indeed, this process of innovation and competitive response underpins the dynamism of the market system.”⁵⁴

“[Given] the costs of inappropriate intervention and the practical difficulties of intervening efficaciously, it is important that access regulators are not overly ambitious. The costs potentially associated with efforts to fully remove monopoly rents might suggest that the focus of regulators should be a more modest one of reducing demonstrably large rents. Similarly, the extensive information required to base access prices on precise assessments of firms' costs, and the attendant risk of mistakes, might provide a case for less intrusive approaches, involving some rules of thumb.”⁵⁵

5.5 Who is price regulation protecting?

Retail energy price regulation where retail competition has been introduced is primarily designed to avoid customers being exposed to price shocks especially from the unwinding of cross subsidies. Price shocks might occur in two main ways. The first is via increases in wholesale energy costs but this has little to do with retail competition *per se*. Moreover, ultimately these costs have to be addressed whether or not prices are regulated.⁵⁶ The second is via the unwinding of cross subsidies, which is a function of retail competition.

The value that politicians can place on cross subsidies was highlighted recently in the Australian Financial Review:

⁵³ If the real objective of retail price regulation is to achieve equity objectives, it is not obvious that it is the most appropriate tool to achieve this objective. The concession systems that are already in place to achieve equity objectives would appear to be a more appropriate mechanism.

⁵⁴ Productivity Commission, ‘Review of the National Access Regime: Position Paper’, March 2001, page 71.

⁵⁵ *Ibid.*, page 37.

⁵⁶ Indeed, price regulation to avoid this potential source of price shock is likely to create a cross subsidy from retailers to consumers.

“Cross subsidies may offend competition theory but they can be politically useful, especially in ensuring service provision in regional areas.”⁵⁷

Some key questions for energy retailers are:

- What are the cross subsidies?
- Who would be the winners and losers from removing them?
- How big are they?

The difficulties in answering these questions should not be underestimated. Answering these questions is difficult because it involves attempting to ‘second guess’ market outcomes, which is exercise which should only be undertaken with great caution. Below we provide our, in principle, answers to these questions.

5.5.1 What are the cross subsidies?

Section 5.4.2 describes how cross subsidies might arise and why retailers are best placed to determine the prices that might not be sustainable in an unregulated environment.

In our view the key retail cross subsidies are likely to be as are outlined below.⁵⁸

- From those with a high propensity to switch to those with a low propensity to switch when faced with market prices. The evidence suggests that in an unregulated market, incumbent retailers will “price” the customers’ propensity to shift. With regulated prices, those with a high propensity to shift are subsidising those with a low propensity to shift.
- From urban to rural users (particularly those on off-peak electricity tariffs). In principle, there are only a couple of reasons why rural users should be more expensive to serve purely from a retail perspective. One reason could be the cost of marketing to rural communities (eg. door to door selling is less feasible). Another could be that rural customers are more likely to fall into one of the other categories identified in this section. This could lower the success rates (and therefore cost) of the inevitably generic marketing activities and offers retailers are constrained to provide.

In practice, rural customers in some jurisdictions are not profitable because constraints are being placed on their ability to recover network tariffs and line losses.

In addition, rural customers in some jurisdictions are not profitable at existing regulated prices (eg. those with off-peak electricity in Victoria). With regulated prices, many

⁵⁷ Meagher, B., Adams, B., editorial in the Australian Financial Review, ‘Cross subsidy conundrum in store for telco sector’, 9 October 2002, page 71.

⁵⁸ However, it should be noted that there could be others, which are less apparent and might emerge as the market develops.

urban customers might be subsidising rural customers and there is some evidence to support this (eg. in Victoria).

- From large users to small users. Regulated tariffs often involve retailers recovering their profit margin in the unit charge rather than in the fixed charge. The latter would appear to be a more logical option at least for retailers because their costs are not unit related. To the extent that customers are willing to pay higher fixed charges (and there is commonly significant customer resistance to this), unregulated prices might involve higher fixed charges and lower unit charges to reflect the shift in where the profit margin is earned. This would benefit larger users at the expense of small users.
- From those who are a low credit risk to those that are a high credit risk. Markets in credit will generally price the creditworthiness of the customer (eg. via the method of payment, or the terms and conditions on which the service is provided). With regulated prices (and terms and conditions) customers who are a high credit risk are being subsidised by those who are a low credit risk.
- From those with a flat⁵⁹ load profile to those with a peaky⁶⁰ load profile. Regulated tariffs do not generally provide domestic customers with very accurate price signals regarding the cost of their energy consumption at particular points in time. This cross subsidy is a function of the use of accumulation meters and profiling in the first instance, so it is not obvious that price deregulation of itself would result in this cross subsidy being unwound. In practice, both steps would need to be taken (i.e. the introduction of interval meters and price deregulation)⁶¹.

5.5.2 Who would win and lose from removing price regulation?

For the cross subsidies identified, the likely winners and losers of removing price regulation are outlined below. It should be stressed, however, that retailers are likely to make decisions on prices that might exploit none, one or more of these cross subsidies into a package that is likely to be attractive to a particular market segment of a reasonable size.

- The evidence presented in Section 6 tends to indicate that a customer's propensity to shift is a function of customer characteristics rather than the product itself. The evidence from the UK suggests that, although customers from higher social grades are more likely to consider switching, they are less likely to switch (eg. due to the hassle factor). It shows that younger adults are most likely to switch. The winners are likely to be younger households (who are probably also larger users).

⁵⁹ Reasonably consistent use of energy throughout the day and year.

⁶⁰ Relatively high use of energy at times of peak demand on the system overall.

⁶¹ We believe this is a very important micro-economic reform issue in the electricity sector. The system load profile has been getting steadily more 'peaky' – particularly in southern States. Peakiness makes electricity more expensive – because of the need to build very expensive generation and network capacity that is rarely used. Failure to allow these costs to flow through to the consumers causing them is, in our opinion, a serious public policy issue, which needs to be addressed based on a thorough understanding of the full costs and benefits.

- The winners of removing the first urban-rural cross subsidy are likely to be all urban users (and losers the converse). The winners of removing the second urban-rural cross subsidy are likely to be customers without off-peak electric heating; the losers would be all those with it.
- The winners of removing the ‘usage’ cross subsidy are likely to be the larger of users on regulated tariffs. The losers are likely to be all below average users.
- The winners of removing the ‘credit’ cross subsidy are likely to be the all customers for whom payment difficulties in relation to energy bills are seldom an issue. The losers are likely to be mostly vulnerable customers who are either having temporary or permanent difficulties in paying their energy bills.
- The winners of removing the ‘time of use’ cross subsidy are likely to be all those domestic users without air conditioning (or electric heating in winter peaking jurisdictions). The losers will be the opposite group.

5.5.3 How big are the cross subsidies?

Attempting to estimate the size of these cross subsidies is beyond the scope of this report and a significant task in its own right. In addition, the size of the cross subsidy is only one relevant issue. The number of winners and losers is likely to be just as important both from an economic and political perspective.

From an economic perspective, a cross subsidy that disproportionately benefits a small but significant and well-defined customer group is more likely to be unwound by competition. Where it is more difficult for the retailer to target the relevant customer group and provide a significant saving, the “cross subsidy” is less likely to be unwound.

From a political perspective, if the losers are sufficiently numerous (are of political importance) and lose enough (eg. 10%) but the winners are spread widely and the benefits more thinly, it becomes more difficult to justify unwinding cross subsidies.

We are therefore not in a position to assess the size of the cross subsidies given the information available to us. However, in principle, we would not be surprised if, based on reasonable assumptions, the following results were generated.

- The cross subsidy associated with the customers’ propensity to shift is likely to be large and the winners are likely to be a smaller group than the losers. In the UK, for example, the price differential between incumbent retailer prices and those of their competitors is typically around 10% and they have shed over 30% of their customer base.
- The first form of urban-rural cross subsidy is likely to be modest. The second form of urban-rural cross subsidy (eg. the one driven by the nature of many rural customers’ use) is likely to be significant. The winners are likely to be a smaller group than the losers.

- The ‘usage’ cross subsidy is likely to be large. Given the distribution of usage there is likely to be a small group of large users who would benefit and larger group of below average users who would be small losers (but the smallest users would be major losers).
- The ‘credit’ cross subsidy is likely to moderately large. However, the winners are likely to be a much larger group than the losers.
- The ‘time of use’ cross subsidy is likely to be large. The proportion of winners or losers depends on the penetration of the appliances. In some jurisdictions, however, the winners could be a much smaller group than the losers.

Governments are likely to be most concerned with material cross subsidies that affect politically important groups (eg. the rural sector) or those that further marginalise particular customer groups (if, for example, customers on fixed incomes, such as the elderly, have a low propensity to shift).

For example, the UK experience shows that, as a general rule, lower income customers are participating in the competitive market to a similar degree as higher income customers. It also shows that older customers have a significantly lower propensity to shift than younger customers. Indeed, the Regulator is intervening in the market to attempt to increase older customers’ propensity to shift (which again highlights the extent to which the key issue is a distributional one). The UK Regulator does, however, have a statutory responsibility for the disabled and chronically sick, pensioners, those on low income and rural consumers.

Governments might be particularly concerned that prices will go up for a majority of customers with a low propensity to shift, and that not all of this would be passed to customers with a high propensity to shift. In other words, retailers would be beneficiaries (i.e. under existing regulated prices there is a cross subsidy from retailers to customers). They might perceive this to be an abuse of market power but this situation arises in many markets, particularly those that impose high transaction costs on the customer and are of low economic value.

Conclusion

Many customers are currently beneficiaries of cross subsidies, and most of them are not vulnerable customers. While most vulnerable customers are likely to be beneficiaries of cross subsidies, many will not be (eg. vulnerable customers in the city are subsidising rural customers). Indeed, some of the cross subsidies (eg. those associated with profiling) are likely to discriminate positively against the most vulnerable customers.

Improving customer protection frameworks for vulnerable customers may assist governments in justifying the removal of price regulation. However, those measures target a much smaller (and politically less important) group than those that governments are likely to be primarily concerned about when they make decisions on price regulation.

6 Retail energy services

This section analyses the general nature of the retail energy service by examining it from the:

- Customers' perspective to identify how they acquire it and what they value about it; and
- Retailers' perspective to identify how they try to meet customers' needs and the constraints within which this process occurs.

It also identifies the implications this has for the market that provides these services.

6.1 The customers' perspective

Energy retailers provide consumers with ways to buy energy to satisfy their "stationary" energy needs (eg. electricity and gas to provide light, refrigeration, heat etc). The energy retailers' offer to consumers has two key components:

- A price charged for access to energy and for the amount of energy consumed; and
- A method by which customers pay.

Energy retailers charge prices for their services that are a function of the value they provide to customers. To understand the value customers place on energy retailing, it is necessary to understand who energy consumers are and what drives their behaviour.

Australia has approximately 7.7 million and 3.4 million domestic electricity and gas consumers.⁶² The number of electricity and gas consumers reflects both the fundamental importance of the underlying product (i.e. energy and electricity in particular) and the relative importance of these energy sources. Energy is widely considered to be an 'essential service'. The provision of energy is fundamental to social inclusion or participation in society. The demand for energy is derived from the demand for the services energy provides (eg. heat). The demand for retail energy services is, in turn, derived from the demand for energy.

The variable that most distinguishes energy consumers is what they use energy for and thus the level of their consumption. The relationship between the number of customers and energy use is illustrated in Table 3 below. Relatively few large users consume many times the energy used by the vast majority of users. The reference to a "retail energy market" can therefore be rather misleading. As this report is about the extension of retail competition to all users, it focuses on the mass-market (i.e. the small, predominantly domestic user).

⁶² ESAA, *Electricity Australia 2003*, p 46, and AGA, *The Gas Chain – Retailing*, http://www.gas.asn.au/gasfacts/gf_retailing.php?tab=retailing.

Within the consumer mass-market, energy (and electricity in particular) is amongst the most widely used of products, which reflects its “essentialness”. Few other products have a similar degree of market penetration.⁶³

| Table 3: Domestic Penetration Rates for Essential Goods and Services in Australia | |
|--|-----------------------------|
| <i>Product or Service</i> | <i>Penetration Rate (%)</i> |
| Reticulated Water Supply | 90.0 ^a |
| Reticulated Sewage | 90.0 ^a |
| Mains Electricity Supply | 99.7 ^b |
| Gas Supply (Natural gas) | 45.0 ^c |
| Every Day Banking Accounts | 97.0 ^d |
| Bank Issued Credit Card Accounts | 49.3 ^e |
| Insurance (building and contents) | 75.0 ^f |
| Insurance (comprehensive passenger vehicle) | 80.0 ^g |
| Telephone | 97.5 ^h |
| Mobile Telecommunications | 45.0 ⁱ |
| Compact Disc Player | 45.5 ^j |
| At Least One Television | 99.2 ^h |
| More Than One Television | 55.8 ^k |
| Subscription Television | 22.0 ^l |
| Microwave Oven | 78.9 ^k |
| Personal Computer | 48.0 ^m |
| Internet Access | 22.0 ^m |

a – CSIRO Publishing on behalf of the Department of the Environment and Heritage, *Human Settlements Theme Report; State of the Environment Australia 2001 (2000)*

b – Estimate only. Australian Greenhouse Office; *Strategic Study of Household Energy and Greenhouse Issues* notes there were approximately 20,000 households and communities not connected to grid electricity in 1996.

c – Australian Gas Association, *Gas Statistics Australia 20002 (2001-02)*

d – Roy Morgan Research, *ANZ Adult Literacy in Australia National Survey (2003)*

e – Nolan Norton Institute & KPMG, *Credit Cards in Australia; A Research Report (2001)* – forecast for 2000

f – Phillips, M. J. 2002 *Non-insurance / Under-insurance in the Home and Small Business Portfolio*, Insurance Council of Australia (1998/99)

g – NRMA, *Home and Vehicle Insurance – A Survey of Australian Households*, October 2001

h – Australian Bureau of Statistics, *Australian Housing Survey*, 1999

i – Kain, J. 1997 *Australia’s Mobile Telephony Revolution*, Economics, Commerce and Industrial Relations Group (forecast for 2000)

j – Ironmonger, D.S., Lloyd-Smith, C.W. & Soupourmas, F. 2000 *New Products of the 80s & 90s*, Melbourne University; Household Research Unit (1995)

k – Australian Bureau of Statistics, *Time Use Survey*, 1997

l – Williams, K. (CEO) 2002 *Subscription Television in Australia*, Foxtel (assume 2002)

m – Australian Bureau of Statistics, *Population Survey Monitor*, November 1999

Note – the year in brackets is the year of the data in each report

⁶³ Market penetration is a function of the lack of substitutes and ways of supplying energy (ie. off the mains).

6.1.1 The purchase decision making process

The standard model of buyer behaviour assumes that the purchase decision is a (often complex) function of three key variables:

- Market stimuli - product, price, place, promotion, people and processes;
- Other stimuli - the economic, technological, political and cultural environment; and
- The buyers' characteristics and decision-making processes.⁶⁴

On the basis of these variables, consumers make decisions regarding product or service choice, brand and dealer choice, purchase timing and amount. This analysis focuses on the decision that consumers make on who their retailer is (i.e. dealer or brand choice in the context of the retail energy market), rather than the decisions that are made on how much energy to consume (although there may be some similarities in decision making processes).

6.1.2 The nature of the offer

The retail energy "product"

"Products" are often defined by the:

- Function they provide;
- Scope of that function; and
- Time they have been in the market place.

Products are defined according to their durability or tangibility. This results in the identification of three basic types of "product": non-durables (eg. food), durables (eg. computers) and services (eg. legal advice). Services tend to be intangible and perishable (i.e. the actual service cannot be retained after it is produced, but the effect of it can be).

Products are also defined by the scope of the function they provide at three levels:

- The *core* product (i.e. the key benefit the customer is actually buying);
- The *actual* product (eg. quality level, features, styling, brand name and packaging); and
- The *augmented* product (eg. installation, delivery and credit, warranty, after sale service).

Energy has features both of a non-durable product and a service. Consumers use energy like they do for many other non-durable products (eg. food – which is also used for energy). However, consumers are less interested in energy *per se* but rather, they are interested in the

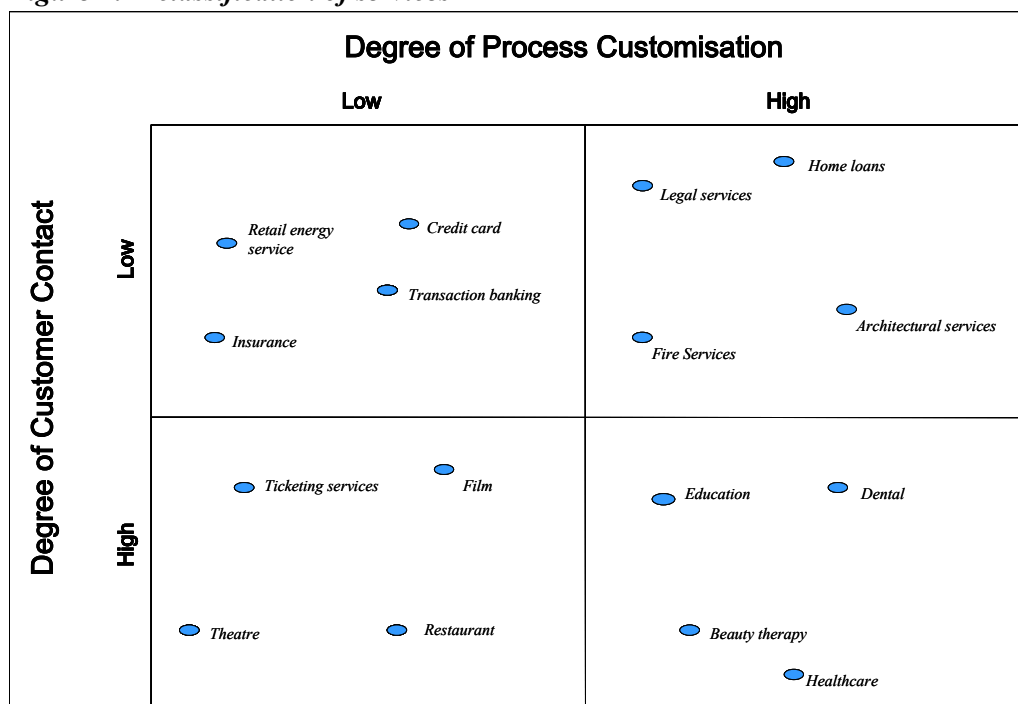
⁶⁴ Kotler, P., Adam, S., Brown, L., and Armstrong, G., 'Principles of Marketing', Prentice Hall, 2001.

services it provides (eg. as a reliable source of heat, light, refrigeration etc.). Energy has few other intrinsic attributes that consumers value.⁶⁵ This is less accurate in the case of food, which has other intrinsic attributes that consumers' value, where they have that luxury.

The retail energy purchase decision is about deciding which retailer to use. Energy retailing involves the provision of a number of services that are peripheral to the core benefit provided by energy. The energy retail offer includes a feature of the *actual* product (i.e. brand) and a number of features of the *augmented* product (eg. purchase terms and conditions). Energy retailing therefore provides a *service* that involves the physical product and, more specifically, the means to acquire it.

Services are sometimes further disaggregated according to the degree of process customisation and customer contact involved in the purchase decision, as illustrated in Figure 1.

Figure 1: A classification of services



The retail energy services offered to domestic users involve a very low degree of process customisation and customer contact. There are some other services and low value products that have similar characteristics (eg. transaction banking, insurance)

The last dimension on which products and services are often assessed is the time they have spent in the market and their market penetration.⁶⁶ Energy use via mains systems obviously

⁶⁵ Indeed, it has few other attributes at all (eg. electricity is odourless, colourless).

has a reasonably long history, as does the provision of the retail energy service. This is evidenced by the fact that energy use per household has been growing at an increasingly slow rate. What is relatively new is the notion of competition in retail energy services.

Retail energy services as a “product” therefore have the following key features:

- It involves the provision of an essential product, as reflected in its market penetration;
- A core product that is difficult to distinguish from the actual product (i.e. the core product has few other attributes, particularly of a qualitative nature);
- An augmented product with a low degree both of customisation and customer contact; and
- A well established market, albeit one in which competition is new.

The nature of retail energy services has important implications for the way in which retailers can compete to win customers, which few other products share.

The price

The average domestic and business users’ annual electricity and gas consumption (and the cost of that consumption) is illustrated in Table 4 below.⁶⁷

| Energy and customer type | Use (GWh ^a , TJ ^b pa) | Use per customer (kWh, GJ pa) | Average price (c/kWh, \$/GJ) | Average cost (\$/pa) |
|---------------------------|--|----------------------------------|---------------------------------|-------------------------|
| Electricity – residential | 51,012 | 6,600 | 12.54 | 828 |
| Electricity – business | 125,267 | 102,700 | 9.19 | 9,438 |
| Natural Gas – residential | 143,148 | 47 | 9.48 | 456 |
| Natural Gas – business | 301,663 | 1940 | 4.88 | 9,467 |

Source: a – ESAA, Electricity Australia 2003
b – The Australian Gas Association, Gas Statistics Australia 2001
c – The Australian Gas Association, Gas Statistics Australia 2001 (1998 data & weighted average)

It shows that the average domestic electricity customer spends approximately \$828 per annum on electricity. The average domestic gas customer spends approximately \$456 per annum on gas. Many domestic households use both forms of energy, and the average household of this type is likely to spend significantly less on electricity than the average household. Indeed ABS data (as outlined in the Table 5 below), suggests that the average households spends approximately \$931 per annum on domestic fuel and power.

⁶⁶ Or what stage of the product life cycle they are at.

⁶⁷ Business includes all non-domestic customers.

Comparing household expenditure on energy relative to other goods and services provides some indication of the relative importance of the energy purchase decision. Table 5 illustrates average weekly household expenditure on goods and services. It shows that for the average household, energy accounts for 2.6% of total expenditure and that energy is one of the smallest weekly expenditure categories.

Table 5: Average Weekly Household Expenditure on Goods and Services in 1998 - 99

| <i>Good or Service</i> | <i>Average Weekly Expenditure (\$)</i> | <i>Contribution to Total Weekly Household Expenditure (%)</i> |
|---|--|---|
| Current housing costs | 97.4 | 13.9 |
| Domestic fuel and power | 17.9 | 2.6 |
| Food and non-alcoholic beverages | 127.0 | 18.2 |
| Alcoholic beverages | 20.4 | 2.9 |
| Tobacco products | 10.7 | 1.5 |
| Clothing and footwear | 31.9 | 4.6 |
| Household furnishings and equipment | 42.2 | 6.0 |
| Household services and operation | 41.3 | 5.9 |
| Medical care and health expenses | 32.5 | 4.6 |
| Transport | 117.8 | 16.9 |
| Recreation | 88.8 | 12.7 |
| Personal care | 13.7 | 2.0 |
| Miscellaneous goods and services | 57.3 | 8.2 |
| Total goods and services expenditure | 699.0 | |

Source: ABS

The essential nature of the service is reflected in the relatively low variation in the level of expenditure between customer groups by household characteristics. Table 6 below shows expenditure on domestic fuel and power as a proportion of total weekly household expenditure, broken down by household characteristics.

For example, in 1998-99 expenditure on domestic fuel and power per week by a household with an income of up to \$300 per week is 1.7% higher than a household with an income of up to \$1,373 per week. In terms of household structure, a household consisting of a single parent with dependants tends to spend a larger proportion of weekly expenditure on fuel and power than a multiple family household. When comparing sources of income, households whose primary source of income is an aged/disability pension spend a marginally larger proportion of weekly expenditure on fuel and power.

| Table 6: Expenditure on Domestic Fuel and Power, by Various Household Characteristics, 1998 - 99 | |
|---|---|
| Household Characteristic | Expenditure as a Proportion of Total Weekly Expenditure (%) |
| <i>By Gross Weekly Income:</i> | |
| Weekly income equal to or less than \$300 (lowest 20%) | 3.7 |
| Weekly income between \$301 and \$552 | 3.3 |
| Weekly income between \$553 and \$884 | 2.7 |
| Weekly income between \$885 and \$1373 | 2.3 |
| Weekly income above \$1374 (highest 20%) | 2.0 |
| <i>By Household Composition:</i> | |
| One family household - one parent with children | 3.2 |
| Other one family households | 2.4 |
| Non family household - lone person | 3.1 |
| Non family household - group household | 1.8 |
| Multiple family household | 2.2 |
| <i>By Source of Income:</i> | |
| Unemployed / sickness / education allowance | 3.4 |
| Age / disability pension | 4.0 |
| Other government pension / allowance | 3.7 |
| Employee income | 2.3 |
| Own business | 2.7 |
| Other income not earned or government pension / allowances | 2.7 |
| Average | 2.9 |
| <i>Source: ABS</i> | |

Conclusion

It is clear that the decision on which retailer to use is of very low economic value to the average consumer, and of reasonably low value to almost all users.

Even if the average customer were in a position to achieve a 10% reduction in their energy bills by changing retailer, this would only reduce their household expenditure by 0.3%.⁶⁸ The benefits are therefore limited. Meanwhile, the “costs” involved in making such a decision might be quite high (eg. time, risk).

⁶⁸ The energy purchase decision (which retailer to use) is unlikely to influence more than 10-20% of that total expenditure. In many cases, the influence could be much smaller than this. Price changes associated with changing retailer will mainly impact upon retail costs, although it may sometimes also influence energy costs.

The relative importance of the energy purchase decision is also reflected in the attention that consumers place on making a related decision - deciding how much energy to consume. Households make these decisions through their behaviour when they use energy and when they acquire durable goods that consume energy (eg. houses themselves, space and water heating equipment).

It has been known for some time that energy (running) costs are generally a low priority in making these decisions.⁶⁹ For example, in 1991 the International Energy Agency stated “most historical records of individual decisions on energy efficiency point to high implied discount rates – at least 35% - and, in some cases, as much as 200%.”⁷⁰

Moreover, others have concluded that these discount rates are disproportionately high. For example, in 1993 the UK Department of Environment concluded: “Consumers appear to require very much higher rates of return from capital investment in energy efficiency than from investment in energy supply or in other goods and services.”⁷¹ A number of market “barriers” are usually cited as the explanation for such observations (eg. a lack of information). Energy running costs are afforded so little importance that many governments intervene in these markets in an effort to get consumers to take energy running costs into greater account in making these decisions.⁷²

The low economic value on the energy purchase decision has important implications for the nature of the competition that one would expect to occur between retailers.

The Place, Promotion, People and Processes

The other market stimuli refer to the marketing channels through which the product is brought to the market (i.e. place), the way in which they are made aware of the product and persuaded to use it (i.e. promotion), and the role of people (eg. telephone sales people) and processes (eg. what customers have to do to buy your product) in the marketing mix. Given the nature of energy retailing (eg. it occurs in cyberspace), these aspects of the service are best discussed from the retailers’ perspective.

⁶⁹ This is least accurate in the case of services that are both expensive (ie. use a lot of energy) and have fewer other attributes customers’ value (eg. water heating systems).

⁷⁰ International Energy Agency, ‘Energy and Environment Series: Energy Efficiency and Environment’, OECD, Paris, 1991, page 83.

⁷¹ Evidence submitted by the UK Department of Environment to the House of Commons Environment Committee, ‘Energy Efficiency in Buildings’, Fourth Report, Session 1992/03, Volume II, HMSO, London, November 1993, page 3.

⁷² Government interventions include thermal building standards, minimum energy standards and voluntary energy labelling for appliances. Government interest has been heightened in more recent times by the growing recognition of the external costs of energy consumption that are not factored into the price (eg. climate change).

6.1.3 The external environment

The key features of the external environment that are relevant to the retail energy purchase decision are outlined below at a broad and specific level. The broad issues identified relate to the implications for retail energy competition associated with how it came to exist (and are discussed within the context of the political environment). The specific issues identified focus on how the current environment influences retail energy purchase decisions.

Political

The most unusual feature of retail energy markets is that they did not evolve as a result of changing consumer needs or the advent of new technology (although the latter helped). Rather they were “created” by removing existing restrictions on competition.

Retail energy markets exist within a highly regulated environment because of the:

- Sheer technical complexity of creating functioning markets in electricity and gas;
- Costs and benefits of introducing less regulated and more complex forms of competition initially, that might enable retailers to offer a wider range of services; and
- Perceived need to provide consumers with some interim protection given the importance of the service and the uncertainties on how the competitive market might evolve.

These constraints have had a significant impact upon the way in which retail competition has been introduced and, thus, on the nature of competition that is likely to result.

Significant political issues associated with the price and availability of energy still exist. These issues arise at all stages of the energy delivery service chain (eg. concerns about the lack of competition in gas production and electricity generation, concerns about the adequacy of investment in gas and electricity transmission and distribution and concerns about deregulating retail energy markets). Political considerations therefore continue to play a significant role in shaping the market, and thus the environment in which consumers make the retail energy purchase decision.

Technological

Energy is a complex product for consumers to understand. The difficulties customers have in understanding the product is highlighted in the problems they face in making decisions regarding their energy use. For example, despite the potential to make “cost effective” reductions in energy use, a new national survey in the United States reports “90 percent of Americans would personally take action to prevent the over-consumption of energy, if they

*knew what they could do. Energy and home efficiency experts assert the possibilities are staring homeowners right in the face.*⁷³

The retail energy purchase decision is likely to be made within some similar constraints (eg. to the extent that it involves decisions regarding the impact of different tariffs etc).

Economic

The most important economic issue is that the decision is of low economic value.

Environmental

Energy is fundamental to social inclusion or participation in society. The focus of energy provision was therefore, until relatively recently (late 70s), about ensuring everybody had access to these services (eg. prices were often set more with political and social objectives in mind). More recently, the focus has shifted towards ensuring that the services are provided as efficiently as possible and that consumers pay the full cost of service provision.

The purchase decision consumers are now free to make relates to a service that many are still likely to view in the context of the 50 years up to the adoption of Competition Policy rather than in the 'new way'. It is also apparent that the:

- Service has few attributes that have value from a cultural perspective (eg. style). The retail energy purchase decision raises the environmental implications of energy use, and a small proportion of customers appear to be a willing to do something about these implications; and
- Decision impinges on increasingly limited and valuable leisure time.

6.1.4 The buyers' characteristics and decision making process

Given that the market covers virtually every household in Australia, it is not possible to identify the buyer's characteristics. The purchase decision is, however, likely to be made by the "manager" of the household, but may be influenced by other household members.

6.1.5 Conclusions on the customers' perspective

The retail energy purchase decision involves a service:

- Of very low economic value;
- Generally of very low non-economic or emotional value;

⁷³ http://www.ipsos-pa.com/dsp_displaypr_us.cfm?id_to_view=1933, 8 October 2003.

- That can be highly complex for the typical consumer to understand (and therefore time consuming and risky); and
- Decision that is only likely to be made periodically.

Moreover, due to the history of retail competition consumers are faced with a purchase decision that is quite new to them.

There are a number of products that display similar characteristics to retail energy services. Analysing consumer behaviour in these markets provides an indication of what might be a reasonable expectation in the retail energy market.

For example, a recent report by the UK Department of Trade and Industry (“DTI”) presented a market research on switching suppliers. It researched the following markets: car and home insurance, fixed line and mobile telephones, current account and mortgage banking services and energy.

The UK evidence suggests that switching rates vary quite substantially across these products. The average switching rates over the preceding five years varied from a high of 53% in the case of car insurance to a low of 6% for current account banking. Gas and electricity recorded the switching levels of 37% and 26% respectively (significantly higher than everything except car insurance and home insurance – 30%).

Indeed, the DTI expressed some surprise regarding the levels of switching in energy, given the limited economic benefits. It stated:

“Despite the relatively high levels of switching in home energy, only nominal savings are expected as a result of switching in these markets.”⁷⁴

The UK evidence also shows the difficulty that customers can have in understanding their options is by no means unique to energy. In most of these markets it was noted that customers had difficulty comparing offers. This was true in the energy, mortgage, banking and telephone markets. For example, in relation to mobile phones:

“The qualitative research also indicated that consumers find retailers’ brochures and literature promoting mobile phones and tariffs highly confusing. Consumers were, almost without exception, repelled by the crowded pages, tiny print and complexity of tariff choices available.”⁷⁵

⁷⁴ The Department of Trade and Industry, ‘Switching Supplies’, a research study commissioned by the Consumer Affairs Directorate, United Kingdom, November 2000, page 11.

⁷⁵ Ibid, page 32. The only exception was in the insurance industry which it noted was highly price sensitive, and where most consumers found it easy to compare offers, with information that was easy to digest and relevant to the customer’s personal circumstances. The market was also deemed to be highly competitive with a large

The DTI also noted:

“but there is significant evidence that many consumers are not well informed when initially purchasing and are basing decisions on information gathered through much more informal processes than a logical comparison between products and packages.”⁷⁶

These conclusions would appear to be consistent with the conclusions drawn from behavioural economics, which demonstrated that consumers often rely on:

“intuition and rules of thumb to make decisions, often without perfect knowledge.”⁷⁷

6.2 The retailers’ perspective

The fundamental source of shareholder value for *any* business is the provision of a service that meets customers’ needs. Ultimately, this is also likely to be true of businesses that are subject to regulation. Regulation can, however, blur the link between meeting customer needs and business value.

Energy retailers seek to add value by providing energy services at a price and in a manner that meets customers’ needs. It involves the following key functions:

- Sales and marketing (eg. to generate revenues by retaining and winning customers);
- Billing and revenue collection (eg. to generate cash inflow);⁷⁸
- Customer service (eg. to manage customer communication at reasonable cost);
- Risk management (eg. minimise energy costs by managing the intermediaries’ risk).

The first function is a profit centre, while the last three functions are largely cost centres.⁷⁹

In principle, energy retailers can add shareholder value in number of ways. For example, energy retailers might be able to increase revenues cost effectively by:

- Increasing prices where that is feasible;
- Increasing the number of customers served (eg. by lowering prices); and
- Expanding the range of services provided.

number of players. Its research did not divulge if consumers understood the terms and conditions which were associated with these contracts.

⁷⁶ Ibid, page 33.

⁷⁷ The Economist, ‘All too human’, 12 October 2003, page 76.

⁷⁸ Sometimes the metering and or meter reading function are also included.

⁷⁹ Energy trading can also be a profit centre, but that is a function that can and usually is undertaken separately to energy retailing (ie. it is similar to the distinction between stock broking and proprietary trading).

Energy retailers might be able to make value adding cost reductions by:

- Managing their input costs and trading risk more effectively;
- Utilising more efficient systems in relation to their costs (eg. customer service etc.); and
- Focusing on serving particular market segments that are the most profitable (eg. customers who are prepared to use lower cost and quicker forms of payment).

To assess the relative attractiveness of these potential sources of value it is necessary to understand the constraints under which energy retailers operate. This includes both the constraints created by the customer (as discussed above) and by the nature of the retail business.

6.2.1 The economics of energy retailing

The constraints created by the nature of the retail business are a function of the economics of energy retailing. There are two key aspects of the economics of energy retailing:

- The size of retail margins; and
- The make up of retail costs.

Like all retailers, energy retailers provide the interface between the supply chain and the customer. As such, many of the costs energy retailers “incur” are passed through from other parts of the supply chain (eg. electricity generation and gas production and energy transmission and distribution). Indeed, in the case of energy, the retailers’ costs are a relatively small proportion of the final price of energy.

The figures below show the proportion of the final price of electricity and gas for a typical Victorian domestic customer broken down by supply function.⁸⁰ It shows retail operating costs account for approximately 12% of the final price of electricity, and approximately 15% of the final price of gas. This proportion is a function of the relative cost of the service that energy retailers provide.⁸¹

⁸⁰ Charles River Associates, ‘Electricity and Gas Standing Offers and Deemed Contracts (2003)’, December 2002. Proportions are based on the maximum costs of a range and represented proportions are of an average residential consumer’s bill in Victoria.

⁸¹ It differs between electricity and gas primarily because of the higher relative cost of other parts of the electricity supply chain (ie. the electricity supply chain includes generation). The costs of retail function in each case are quite similar, although the cost of risk management is likely to be higher in the case of electricity.

Figure 2

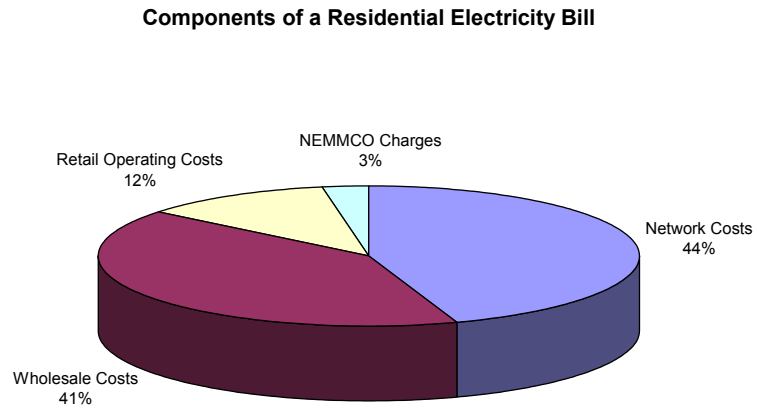
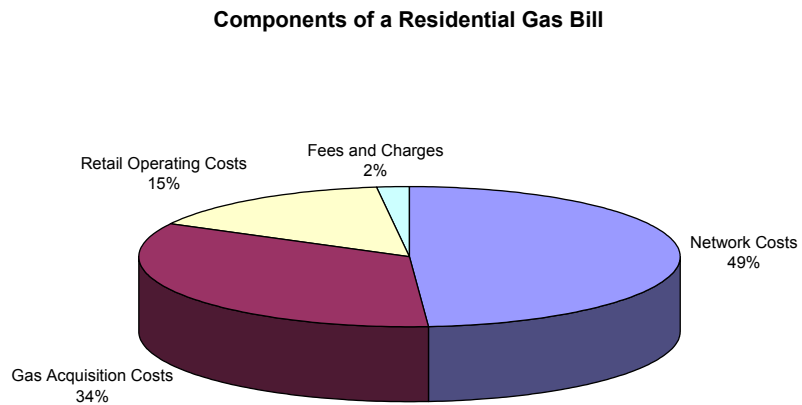


Figure 3



The energy retailers' own costs are therefore a modest proportion of customers' bills.

IPART's recent issues paper outlines the determinations made by various Australian regulators in relation to retail costs and retail net margins.⁸² Retail costs per annum per customer are put at between \$35-80. Net margins for electricity and gas retailers are put at between 1.5-5.0% and 2-3% respectively. It should be noted that these "net" margins are before interest and tax.

For example, if it is assumed that the typical energy bill is in the order of \$1,000 per annum, the retailer makes between \$15-50 per annum.

This implies that in "typical" circumstances (i.e. where retailers have similar input costs) it might be extremely difficult for retailers to offer price reductions that are likely to be attractive to significant numbers of customers (eg. if customers need price reductions in the region of 10% to shift in significant numbers).

The retailers' costs are primarily either fixed or customer-related. A retailer's fixed costs are primarily embedded in the information technology systems required. A retailer's customer related costs are primarily a function of processing the needs of each customer (i.e. having the information available to bill the customer, sending bills etc).

The evidence in the public domain regarding the cost structure of the "typical" retailer is somewhat ambiguous. However, there is some anecdotal evidence that might provide an indication of the cost structure of retailing.

The first bit of anecdotal evidence is the desire of many retailers to get larger by acquisition.⁸³ It appears that a retailer is unlikely to be able to achieve the optimal cost position to be competitive across a market as a whole (i.e. the lowest average cost per customer), perhaps without customer numbers approaching one million.⁸⁴ It should be noted, however, that some retailers are much larger than this, where they are in a position to be (eg. in the UK British Gas Trading has 13 million gas customers and 6 million electricity customers, although most of the latter are likely to be dual fuel customers).

This implies that there are exploitable economies of scale by making, in some cases, dramatic increases in the customer base and the scale of the business. This would appear to suggest that the fixed costs are a significant proportion of total costs.

The second bit of anecdotal evidence is the response of retailers to the threat of losing customers. Faced with this threat, retailers have two options: to lower prices across the

⁸² IPART, 'Review of Gas and Electricity Regulated Retail Tariffs: Issues Paper', October 2003.

⁸³ The alternative explanation is that they may hope to gain some exploitable market power.

⁸⁴ Australian Financial Review, 'Running rings around small rivals', 8 July 2002, page 15. This also apparently extends to the issue of branding. See Australian Financial Review, Editorial by Conor Wynn, 'Electricity branding: get big or get out', 11 April 2002, page 63.

board and retain volumes (i.e. customers), or to retain prices and be prepared to lose customers. If the costs of retailing were highly customer related, a business might be content to shed customers and retain margins (i.e. there would be few economies of scale). Conversely, if the costs of retailing were highly fixed, a business might be more inclined to reduce prices.

The international experience suggests that incumbent retailers are generally not reducing prices across the board to maintain market share. In other words, they have often been prepared to lose a significant proportion of their customers but retain margins on the remainder (as is illustrated in Section 7).⁸⁵

Incumbent retailers appear to be prepared to “price” the typical customers propensity to shift (i.e. customers’ transaction costs). In other words, they are prepared to allow their prices to diverge from that of their competitors to a level (eg. around 10% in the UK) that would in principle allow them to maximise their overall returns, but may involve losing a significant number of customers (eg. around 30% in the UK) or trying to win those who are price sensitive via market contracts.

Losing customers would appear to imply a significant reduction in costs (and therefore some margin retention), whereas reducing prices to all customers implies no reduction in costs (and therefore margin erosion).⁸⁶ This implies that customer costs are a reasonably significant proportion of retail costs.

The two key features of energy retailing from an economic perspective are as follows:

- Energy retailing is an extremely low margin business. Indeed, it is difficult to think of another retail business that would involve lower margins; and
- Energy retailing is a high volume business that involves significant fixed costs.

6.3 Implications for retail competition

The value customers attach to retail energy services and the economics of energy retailing has a number of important implications for the ways in which a retailer is most likely to be able to add value and thus for how they compete.

One of the most well known tools used to assess the effectiveness of competition is the analytical framework developed by Michael Porter. He argues: “*competition in an industry*

⁸⁵ They have, however, often fought hard subsequently to win these customers back on market contracts. And presumably do this more proactively now than they have appeared to do in the past.

⁸⁶ In some jurisdictions (notably NSW) the market appears to be developing in a different way. In that jurisdiction, a significant number of customers have moved on to market contracts with their incumbent retailers, but relatively few have switched supplier. See IPART, ‘Review of Gas and Electricity Regulated Retail Tariffs: Issues Paper’, October 2003.

is rooted in its underlying economic structure” and “depends on five basic competitive forces.”⁸⁷

The five competitive forces are the bargaining power of suppliers and buyers, the threat of substitutes and new entrants and the degree of competitive rivalry amongst existing firms. He then identified the variables under each force that determine its influence. For example, there are no substitutes to retail energy services. The threat of new entry is lowered by the economies of scale in retailing⁸⁸, but arguably increased by the lack of product differentiation. Equally, the customers’ bargaining power is lowered (due to the low margin high volume nature of the business), but also increased by the lack of product differentiation.

The relative importance of these underlying variables and forces is, however, highly dependent on the industry in question. This section focuses on those factors that appear to play a primary role in determining the nature of competitive activity in retail energy markets.

The customers’ perspective

The retail energy purchase decision is a *low involvement* decision but also one with which is unfamiliar to customers. The evidence strongly suggests that domestic customers will afford very low importance to this decision, and do so for good reasons. In other words, they will generally not give much thought or time to the decision. They will also tend to be risk averse due to their uncertainty associated with the benefits of switching.

The UK DTI’s market research highlights that these constraints are a function not just of energy retailing but retailing a number of services:

“The research revealed that, whilst money was not generally unimportant, choosing between different suppliers in the markets studied was (sic) relatively low priority by comparison with other aspects of consumers’ lives. Consumers are very keen to avoid unnecessary hassle in their lives and, whilst many say that they like to shop around to save money, this often seems to be limited to taking advantage of supermarket offers. In practice, consumers are more likely to feel that all companies are the same and that life is too short to worry about saving a few pounds here and there.”⁸⁹

The DTI also stated:

⁸⁷ Porter, M., ‘Competitive Strategy: techniques for analysing industries and competitors’, The Free Press, 1998, page 3.

⁸⁸ The economies of scale extend beyond the costs outlined above. It can also extend to the benefits of the portfolio effect on input costs (eg. managing the electricity purchase costs risks of a portfolio of customers).

⁸⁹ The Department of Trade and Industry, ‘Switching Supplies’, a research study commissioned by the Consumer Affairs Directorate, United Kingdom, November 2000, page 13.

“In many consumer markets, consumers are able to balance their decision to switch against their disinclination to do so. Whether a consumer switches to another supplier or not is a function of where the balance lies between these different elements.

In most of the selected markets in this research, the balance of factors is not even, with the scales appearing to be tipped in favour of existing suppliers. Opportunity is limited by a lack of knowledge and trust in alternative suppliers, inadequate information on which decisions can be based and, in some markets, genuine barriers (for example, early redemption penalties in the mortgage market). Disinclination is increased by strong perceptions of the risk of switching or apathy based on a lack of problems with current supply arrangements. Desire is undermined by a lack of perceived benefits including savings. It is therefore generally easier to stay than to switch in most of the markets studied.”⁹⁰

Brand loyalty can therefore be a reasonable response to uncertainty or even perceived uncertainty. For example, studies show that somewhere between 10-20% of customers in petrol retailing are exclusively brand loyal.⁹¹ The UK’s DTI has identified that a significant proportion of customers show a low propensity to shift, which appears to say more about the customers themselves than the products and services in question.

It suggests that, in order to retain customers, a retailer might focus considerable attention on trying to bind the customer to the company by strengthening their brand loyalty.

It also suggests that, in order to win customers, a retailer would need to:

- Be known to customers and trusted by them; and
- Present their value proposition in a simple and readily digestible form (to lower the customers’ general inertia and decision making costs).

Providing unnecessarily confusing choices is unlikely to be a successful strategy to win customers because it will increase their transaction costs. Moreover, to the extent that the more attractive customers are wealthier, energy retailers face the problem that the more attractive customers will place the highest value on their leisure time.

The retailers’ perspective

The low margin nature of the business means that one of the overriding constraints on a retailer who is seeking to serve the mass markets is to have the lowest average cost per customer. This means that retailers must seek to identify the most attractive customers and gradually try to improve the quality of their customer ‘book’. This is not unlike the domestic

⁹⁰ The Department of Trade and Industry, ‘Switching Supplies’, a research study commissioned by the Consumer Affairs Directorate, United Kingdom, November 2000, page 6.

⁹¹ Bennett, D., Ehrenberg, A., Goodhardt, G., South Bank University, London, ‘Two Purchase Analysis of Brand Loyalty among Petrol Buyers’, 2000.

retail banker or insurance company that is constantly endeavouring to improve the overall quality of its loan or insurance book.

To get the lowest average cost per customer, a retailer needs to find low cost ways of:

- Retaining existing customers;
- Serving existing customers; and
- Winning new customers.

The focus on retaining “good” existing customers is highlighted by the focus of marketers on customer retention and brand loyalty. The degree to which businesses have been focussing on these variables has been the subject of much recent debate in marketing circles⁹² (eg. the debate over Coles and Qantas Loyalty Schemes).⁹³ The traditional rationale:

“behind this focus on retention is based on the assumption that long term customers are cheaper to service, more tolerant of higher prices and more likely to recommend your product of service to new customers.”⁹⁴

This debate highlights the degree to which customer retention (often using non price measures) is a major focus in marketing. It would appear, however, that questioning the value of retention marketing is happening least amongst services like retailing:

“However, recent evidence suggests that while these assumptions may hold in contractual relationships such as B2B settings or subscription services like insurance or cellular phone supply, they may prove false in non-contractual settings, such as grocery, fashion and petrol retailing, where the relationship between buyer and seller is not governed by a contract or membership.”⁹⁵

The importance of minimising the cost of serving existing customers is illustrated by the impact that customers, who require a higher cost to serve, have on a retailer’s bottom line. This is best illustrated by an example, where in the most extreme case, a customer does not pay at all.

If it is assumed that a “typical” customer does not pay its total annual bills, the retailer loses its net margin of \$15-\$50 dollars. However, it still incurs costs of up to \$950-985. This means that one customer who does not pay, could wipe out the margin on up to 19-66

⁹² Reinartz, W., Kumar, V., ‘The Mismanagement of Customer Loyalty’, Harvard Business Review, Vol 80, No 7, July 2002, pages 86-94.

⁹³ Gans, J., King S., Editorial in the Australian Financial Review, ‘Petrol deals a blow to the average consumer’, 20 August 2003, page 55.

⁹⁴ Hammond, K., ‘Is customer retention always the answer?’, Australian Graduate School of Management, On-Line Features, 2003, page 1.

⁹⁵ Ibid, page 1.

customers. If the retailer has 5,000 customers who are not paying at any point in time, then that could effectively wipe out the margin on up to 95,000-330,000 customers.

Energy retailing is a service, which features a low degree of customisation and a low degree of customer contact. The challenge for retailers in winning new customers is to expand their customer base using low cost means. Approaches that can be replicated for large number of customers are likely to be the most cost effective option (eg. direct mail, telephone and door to door). It also constrains the variety of price/service offers that a retailer is likely to develop which means that differentiation is most likely to occur on a customer group basis. This problem is exacerbated to the extent retailers lack information on customers.

A lot of the activity is likely to be pushed by supply rather than pulled by demand. In other words, retailers will be initiating the process and trying to drive customers toward particular product offerings. As the DTI notes:

“low levels of awareness of the supply alternatives are a reflection of the lack of interest and proactivity displayed by consumers in these markets.”

“The primary motive for switching in energy is to save money and for many consumers the savings are perceived to be too small to warrant the effort.”

“The main barriers to switching energy provider are consumer inertia and high levels of satisfaction with service (83 per cent of the quantitative sample claimed to be happy to stay with their current provider. It is easier to stay than to switch because of an absence of problems rather than because of positive loyalty to a company and because the benefits generally do not outweigh the perceived hassle of switching for the vast majority of consumers.”⁹⁶

The importance of the cost associated with winning new customers is highlighted by the focus placed on customer “acquisition” costs either via market growth or buying other retail businesses. According to the Australian Financial Review: *“The price-per-customer is commonly used as a valuation measure for energy retailers.”⁹⁷*

Indeed, one of the most commonly used measures of the relative cost of acquiring retail businesses in the capital markets is the cost per customer (just as it is Regulated Asset Base multiple for regulated businesses).⁹⁸ Most transactions appear to have valued customers in the \$400 to \$850 range (with the higher end mainly for customers who could be provided with dual fuel offers). Using the net margins quoted above, this implies customers are being

⁹⁶ The Department of Trade and Industry, ‘Switching Supplies’, a research study commissioned by the Consumer Affairs Directorate, United Kingdom, November 2000, pages 17 and 18.

⁹⁷ Australian Financial Review, ‘Australian Energy poised’, 6 August 2003, page 27.

⁹⁸ Australian Financial Review, ‘AGL needs up to \$500m equity for Pulse’, 1 July 2002, page 16. See also the Allen Consulting Group, Review of the Gas Code: Commentary on Economic Issues, Report to BHP Billiton, August 2003. The paper provides a summary of some Australian retail energy business transactions.

acquired on yields of up to 12.5% (excluding interest and tax) but in many cases significantly less than this.⁹⁹

Indeed, to a degree the capital markets appear to regard energy retailing to be effectively a franchise business, which is not uncommon in markets for “subscription” services. In other words, some of the competition in the retail energy market might be via competition “for the market” rather than “in the market”.

6.4 Conclusions

Energy retailers are likely to compete in a number of different ways and on a number of different levels. Only some of this will be the most obvious form of competition, seeking to win new customers by offering lower prices. In principle, and ultimately in practice, it is likely to be a price driven market. However, a lot of the competitive activity that is occurring at any particular point in time might involve activities that are designed to avoid pure price competition.

Indeed, one of the key focuses for marketers of less differentiated goods is to find ways to avoid competing on price and to ensure “*attention is deflected from price*”.¹⁰⁰

As Porter notes:

“Some forms of competition, notably price competition, are highly unstable and quite likely to leave the entire industry worse off from the standpoint of profitability. Price cuts are quickly and easily matched by rivals, and once matched they lower revenues for all firms unless industry price elasticity of demand is high enough. Advertising battles, on the other hand, may well expand demand and enhance the level of product differentiation in the industry to the benefit of all firms.”¹⁰¹

There is also considerable evidence that this strategy can be successful.

“Contrary to initial predictions that the Internet would lead to the emergence of a frictionless economy, empirical research shows that online price dispersion is persistent and is no lower than offline price dispersion.”¹⁰²

This does not mean, however, that over the long run prices are not broadly efficient.

⁹⁹ The yield is in the inverse of the price/earnings ratio.

¹⁰⁰ B2B International, ‘How to Avoid Competing on Price’, www.b2binternational.com/artilce2.html.

¹⁰¹ Porter, M., ‘Competitive Strategy: techniques for analysing industries and competitors’, The Free Press, 1998, page 17.

¹⁰² Ancarani, F., Shankar, V., E-business Research Centre, ‘Price Levels and Price Dispersion on the Internet: A comparison of Pure Play Internet, Bricks –and–Mortar, and Bricks-and-Clicks Retailers’, Penn State’s Smeal College of Business Administration, June 2002, abstract.

From an energy retailers' perspective, the most effective ways to add value are likely to include:

- Expanding the range of services provided to existing customers – because this implies a relatively small cost increase but potentially a larger increase in revenues (without having to change the customer mix);
- Encouraging customers to take up bill payment options and practices that lower the retailers' costs – because this lowers the average cost per customer without having to change the customer mix;
- Seek to make existing customers who are attractive more “sticky” through brand loyalty and/or market contracts – because this might be a relatively low cost way of retaining good customers;
- Putting prices up to existing customers who are unattractive at existing prices – because they can have a magnified impact on the bottom line in very low margin businesses;
- Getting new customers through bulk acquisition – this might be a more cost effective way of acquiring new customers, particularly for retailers chasing economies of scale. This is more likely to occur in a mature market;
- Seeking to win new “good” or low cost customers by offering lower prices – because these customers will fit under existing product offers. The constraint is the difficulty in finding them¹⁰³; and
- Trying to avoid new “bad” or high cost customers – because these customers might not fit under existing product offers. The constraint is the cost of weeding them out of broad based marketing exercises; and
- Trying to offer specialist products for significant market niches (eg. that proportion of customers paid to pay a premium to acquire “green” energy).

Only one of these strategies is likely to be focussed primarily on price (eg. winning new customers). But the costs of developing new tariff options is likely to mean that this will only be done where a significant number of customers are likely to be interested. To that extent, the existing range of product offers act like *de facto* regulated prices because good customers with particular needs that might benefit from a special tariff are unlikely to be a viable proposition.

It should be noted that the constraints on this strategy are likely to be exacerbated by price regulation, as is discussed in Section 8.4.

The UK DTI also focuses on price competition in assessing the ways to assist customers to switch. It argues:

¹⁰³ In the absence of better information retailers are forced to use proxies to establish who good customers might be (eg. using location as an indicator of type of energy use, quantity of energy use and wealth).

“Many of the barriers to switching could be resolved by Industry – clearer price information generally, marketing strategies that include the deliberate provision of directly comparable information with competitors and telephone/Internet-based quotation services; reassurance that it is easy to switch and offers of help where there are high perceived levels of hassle or costs involved, e.g. in banking mortgages. Regulators will, however, have a role in promoting this activity.”¹⁰⁴

The DTI does not explain why the market is not already doing this or why regulators should have a role in this activity, or a role in this activity in the markets identified in particular. What it does indicate is a desire to ensure that the market is working as effectively as possible and a desire to intervene in ways that at least try to work with the market, rather than in opposition to it. In other words, assisting in these processes might be the least worse option, provided it can be done in ways that minimise the distorting impacts on the market.

¹⁰⁴ The Department of Trade and Industry, ‘Switching Supplies’, a research study commissioned by the Consumer Affairs Directorate, United Kingdom, November 2000, page 34.

7 International experience

Retail competition has been introduced in a significant number of countries. We have focussed our analysis on those countries or jurisdictions where there has been an extended period of experience with retail competition where price regulation has also been removed (the UK and NZ). We have also carried out a brief analysis of the United States because the experiences of various States provide some useful insights into price regulation.

7.1 United Kingdom

This section outlines the:

- The process by which prices were deregulated;
- How the decision was made; and
- Key outcomes.

7.1.1 The process by which price were deregulated

Since May 1999, all energy customers in the United Kingdom¹⁰⁵ (“UK”) have been able to choose their gas and electricity retailer. The Regulator (“Ofgem”) continued to impose price regulation until March 2002 although the nature of these price controls changed over this period and were different for electricity and gas supply.

In February 2002, immediately prior to the removal of price regulation, Ofgem said that:

“the best way of protecting customer’s interests in the future is by vigorous use of its competition and consumer law powers rather than specific supply price controls.”¹⁰⁶

“Over-regulation could lead to a distortion of competition, and have the effect of limiting the number of competitive offers available for consumers. It may also damage the financial viability of suppliers. If price controls are set incorrectly, raising prices or constraining the finances of suppliers, the long-term interests of customers will not be served.”¹⁰⁷

In June 2003, just over a year after the removal of price regulation, Ofgem said that:

“The evidence in this paper suggests that, over the ensuing year, competition has become an even more powerful influence on the behaviour of companies in the market, and is effective in creating a range of consumer benefits.”¹⁰⁸

¹⁰⁵ Our review of the United Kingdom excludes Northern Ireland.

¹⁰⁶ Ofgem, ‘Review of domestic gas and electricity competition and supply price regulation: Conclusions and final proposals’, February 2002, Executive summary.

¹⁰⁷ Ibid, page 3.

¹⁰⁸ Ofgem, ‘Domestic gas and electricity supply competition: Recent developments.’ June 2003, page 4.

Gas

Retail competition for domestic consumers was phased in between April 1996 and May 1998. British Gas Trading (“BGT”) was the monopoly gas retailer prior to the introduction of retail competition.

Retail prices were regulated using a CPI-X price control for retail costs, with a pass-through of other costs, between April 1997 and March 2000. The price control sets caps on each of BGT’s retail gas tariffs - Direct Debit, PromptPay, LatePay (“Standard”) and PrePayment. BGT was required to offer these four regulated tariffs to all its customers.

BGT’s price caps for Direct Debit customers were removed and revised price caps continued to apply to BGT’s PromptPay, LatePay and PrePayment customers between April 2000 and March 2001.

BGT was subject to relative price regulation between April 2001 and March 2002. The differences between BGT’s Direct Debit and LatePay/PrePayment tariffs, and between BGT’s PromptPay and LatePay/PrePayment tariffs were capped. LatePay and PrePayment tariffs were to be equal.

It is apparent that:

- In setting the price caps Ofgem sought to ensure that they allowed room for competition to develop, as evidenced by the significant price reductions relative to regulated prices that retailers were prepared to offer (see Figure 4); and
- The shifts in price regulation between 1997 and 2002 suggest that Ofgem was gradually unwinding the cross-subsidies that were embedded in regulated prices prior to the introduction of retail competition (particularly those that are broadly a function of the “creditworthiness” of the customer).

Electricity

Retail competition for domestic and small business customers was rolled out between September 1998 and May 1999 following its earlier introduction for larger users. At the time that competition was introduced there were 14 incumbent retailers.

Incumbent retailers’ prices were subject to controls, which capped the average price charged for electricity supplies to domestic credit customers, between April 2000 and March 2002. There were also separate caps on the difference between credit and prepayment charges.

Between 1998 and 2002 Ofgem estimated that the real total costs of supplying domestic electricity customers reduced by 8-17%. During this period, the average real price reduction from incumbent retailers was 8% while those switching benefited from up to 17% real

reductions in prices.¹⁰⁹ Regulated retail electricity prices therefore offered increasing scope for retailers to offer discounts to regulated prices.

The key difference in the gas and electricity price deregulation processes was that competition was phased in for the domestic sector in gas, but in electricity it was introduced at once (probably because the dual fuel capability already existed).

7.1.2 How the decision was made

Ofgem assessed the development of competition in the electricity and gas retail markets in 1999, 2000 and 2001, with its final assessment report dated February 2002. It identified three important conditions that ought to be met before competition could be deemed effective. These were that:

- All customers in the market can attract and are aware of a range of competitive offers, whatever their status, location and levels of consumption;
- The abuse of market power is prevented; and
- The operation of competition is promoting innovation in the market and improved economic efficiency.

In order to assess whether these conditions were being met, Ofgem identified six categories of information on competition and a number of indicators within each category, as is outlined in Table 7 below.

Ofgem did not make a direct connection between the three conditions for effective competition outlined above and the categories and indicators it proposed to assess the effectiveness of competition. This highlights the subjectivity of the issue, as Ofgem acknowledged.

¹⁰⁹ Ofgem, 'Electricity supply competition: An Ofgem occasional paper.' 16 December 2002.

Table 7: Ofgem’s competition indicators

| <i>Category</i> | <i>Indicator</i> |
|------------------------------|--|
| Customers’ experiences | <ul style="list-style-type: none"> ➤ Number of gas or electricity suppliers of which customers were aware. ➤ Proportion of customers having some contact with retailers through various marketing channels. ➤ Proportion of customers satisfied with the service they were receiving from their retailer (<i>qualitative</i>). ➤ Proportion of customers reported having been able to make their own price comparisons (<i>qualitative</i>). ➤ Proportion of customers with pricing information who said they felt “informed” (<i>qualitative</i>). ➤ Proportion of customers who found comparing prices “easy” and proportion of customers who found comparing prices “difficult” (<i>qualitative</i>). |
| Customer switching behaviour | <ul style="list-style-type: none"> ➤ Total number of customer transfers per week. ➤ Net transfers away from the incumbent supplier. ➤ Proportion of customers who had switched supplier. |
| Market shares | <ul style="list-style-type: none"> ➤ Market shares of incumbent retailers in their incumbent supply areas. ➤ Number of customers supplied that were supplied electricity and gas by the same company. |
| Price and non-price offers | <ul style="list-style-type: none"> ➤ Number of active retailers in each supply region. ➤ Median saving offered relative to the incumbent retailer’s prices. ➤ Incumbent prices relative to the maximum level allowed by price controls. ➤ Bundled offers (<i>qualitative</i>). |
| Entry and exit of suppliers | <ul style="list-style-type: none"> ➤ Number of competing retailers. |
| Barriers to entry | <ul style="list-style-type: none"> ➤ Incumbent’s market position and behaviour (<i>qualitative</i>). ➤ The general operation of the gas and electricity markets (<i>qualitative</i>). ➤ Proportion of customers who could be blocked from transferring on grounds of debt. ➤ Proportion of customers with outstanding debt, or having payment difficulties, that have switched. |

While most of the indicators used by Ofgem were quantitative in nature, it did not specify a competition threshold value for each indicator.¹¹⁰ Each time competition was assessed, Ofgem made a subjective judgement on whether competition had developed sufficiently such that future price regulation would be more “*harmful than helpful*” to customers.¹¹¹

¹¹⁰ The ‘entry and exit of suppliers’ category did not appear to be actively used, partly because the key indicator was covered by other indicators (eg. under price and non-price offers).

¹¹¹ Ofgem, ‘Domestic gas and electricity supply competition: Recent developments.’ June 2003, page 4.

Ofgem also assessed whether competition was developing at different speeds for different groups of customers by assessing some of the indicators for different groups of customers.¹¹² In other words, these indicators were applied to segments of the market as well as overall.

Ofgem's view was that competition could not be measured against a simple set of indicators:

“As the development of competition is a dynamic process, characterised by constantly changing structures, behaviour and performance, the development of competition cannot be clearly measured against a simple set of indicators, e.g. market shares. It is important to consider the functioning of the domestic gas and electricity supply market in its entirety. The functioning of the market depends upon the combined effects of the actions of the incumbent, competitors and customers, as well as upon the structural conditions in which they all operate.”¹¹³

It is therefore not possible to demonstrate precisely which factors were compelling in Ofgem deciding that price regulation was no longer necessary (although the increase in switching rates across the market would appear to have been important). However, it is possible to provide some evidence on the levels key indicators had reached when Ofgem concluded that price regulation was no longer necessary, and how that compares with the levels prior to it reaching this view.

Assessment of competition

In February 2002, when the decision to remove price controls was made, the state of the market was as follows:

- Customers' experiences – There was a high level of customer awareness, measured by the number of gas or electricity retailers the customer was aware of. At least 86% of gas and electricity customers were satisfied with the service they were receiving from their retailer. Forty percent said they found comparing prices “easy” while 35% said they found it “difficult”. A number of energy price comparison websites existed.

Very similar experiences were reported in the year preceding price deregulation. The proportion of customer who said they found comparing offers “easy” was 42%, while 33% said it was difficult.

- Customer switching behaviour - 37% and 38% of gas and electricity customers respectively said they had switched retailer at least once since competition was introduced. Switching rates had evened out between most customer groups, including between prepayment and credit payment customers.

¹¹² One set of customer groups were assessed with the indicators standard credit, direct debit and prepayment customers. Another set of customer groups were assessed with the indicators low, medium and high consumption.

¹¹³ Ofgem, ‘Domestic gas and electricity supply: Market survey 2000’, August 2000.

The corresponding figures in the year preceding price deregulation were 29% for gas customers and 18% for electricity customers.

- Market shares - BGT's market share of domestic gas customers had fallen to around 67%. The average market share of incumbent electricity retailers had also fallen to about 67% in their previous franchise areas.

The corresponding figures in the year preceding price deregulation were 71% and 84% respectively.

- Price and non-price offers – Median gas price savings relative to BGT were 14%, 9%, and 5% for standard credit, direct debit and prepayment customers respectively. Median electricity price savings relative to incumbent prices were 5-13% for standard credit customers, 6-14% for direct debit customers and 1-8% for prepayment customers. Dual fuel offers were widespread and some retailers were bundling energy with other products e.g. insurance or telephone services. Four out of five switchers were moving to dual fuel supply resulting in about 7.5 million customers being on dual fuel supply. Other offers include affinity deals and green tariffs.

The sorts of offers being made in the year preceding price deregulation were broadly similar, as is evidenced by Figures 4, 5 and 6 below. The number of customers who had moved to dual fuel supply was 6.8 million at this point in time.

- Entry and exit of retailers – As at October 2001 there were 14 active domestic gas retailers and 10 to 12 active electricity retailers.

The corresponding figures in the year preceding price deregulation were 16 and 13 respectively.

- Barriers to entry – A retailer's ability to block customer transfers due to debt was identified as a barrier. At the time, Ofgem was running a trial aimed at allowing prepayment customers in debt to switch without the transfer being blocked.

Ofgem has actively assisted in the development of competition by increasing awareness of competition and removing barriers to competition. For instance, Ofgem:

- Has actively tackled dubious selling practices. For example, it imposed a £2 million penalty on one retailer for failure to manage direct selling effectively;
- Energy retailers are currently entitled to block customers in debt from transferring to other retailers. Prepayment meter customers account for some 70% of customers in debt. Ofgem has developed a new protocol, to come into operating on 1 January 2004, enabling prepayment customers in debt to switch retailer; and
- Ofgem is running a campaign to encourage older people to switch retailer because this is a key customers group that, in proportional terms, has lower market participation.

7.1.3 Key outcomes

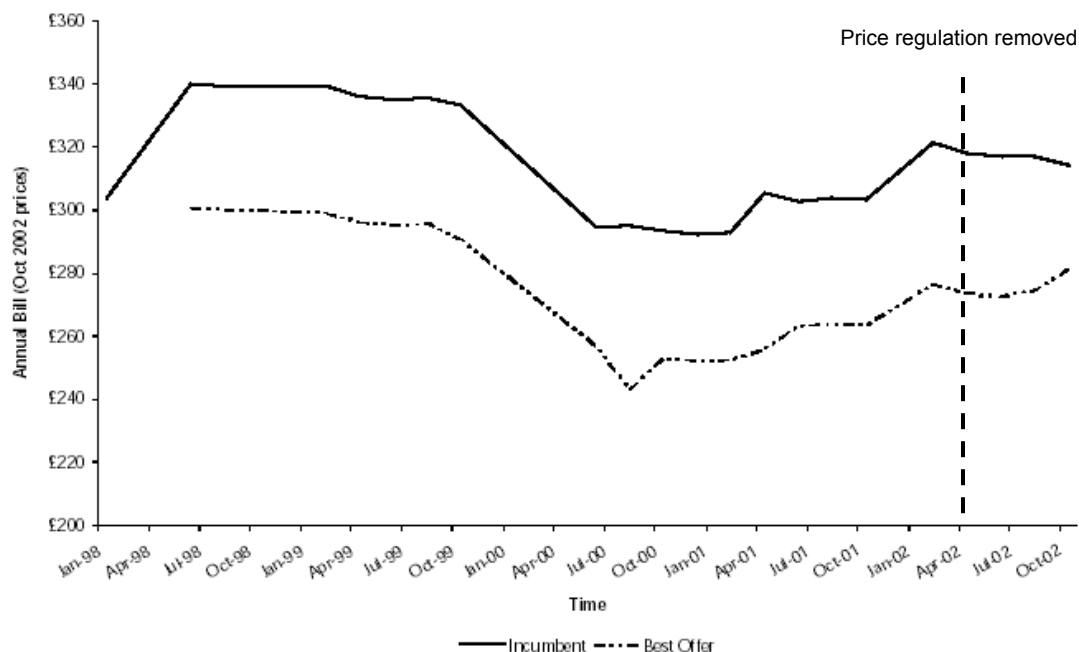
Figures 4, 5 and 6, sourced from a recent Ofgem paper¹¹⁴, show the average energy bill of customers, calculated using the average incumbent energy prices and average best offer of the supply areas in the UK. All prices are converted to bills assuming an average consumption of 3,300 kWh in electricity and 19,050 kWh in gas. All bills are converted into October 2002 money and include Value Added Tax.

The figures indicate that:

- Since the introduction of FRC, the average best discount¹¹⁵ available to customers has remained relatively steady and ranged between 8% and 14%;
- The average best discount for electricity prepayment customers has increased over time. Between October 2000 and October 2002 the average discount increased from 5% to 11%. This suggests that competition for prepayment customers was initially not as strong as for credit customers, but it has since intensified; and
- Price deregulation did not result in a price spike for any customer group by payment method. This suggests that price regulation had provided sufficient headroom and competition prevented price increases.

Similar trends can be observed for each incumbent supply area.

Figure 4: Domestic direct debit gas bills since competition



¹¹⁴ Ofgem, 'Electricity supply competition: An Ofgem occasional paper.' 16 December 2002.

¹¹⁵ The 'best discount' is the difference between the incumbent's prices and the lowest price offered by its competitors.

Figure 5: Domestic direct debit electricity bills since competition

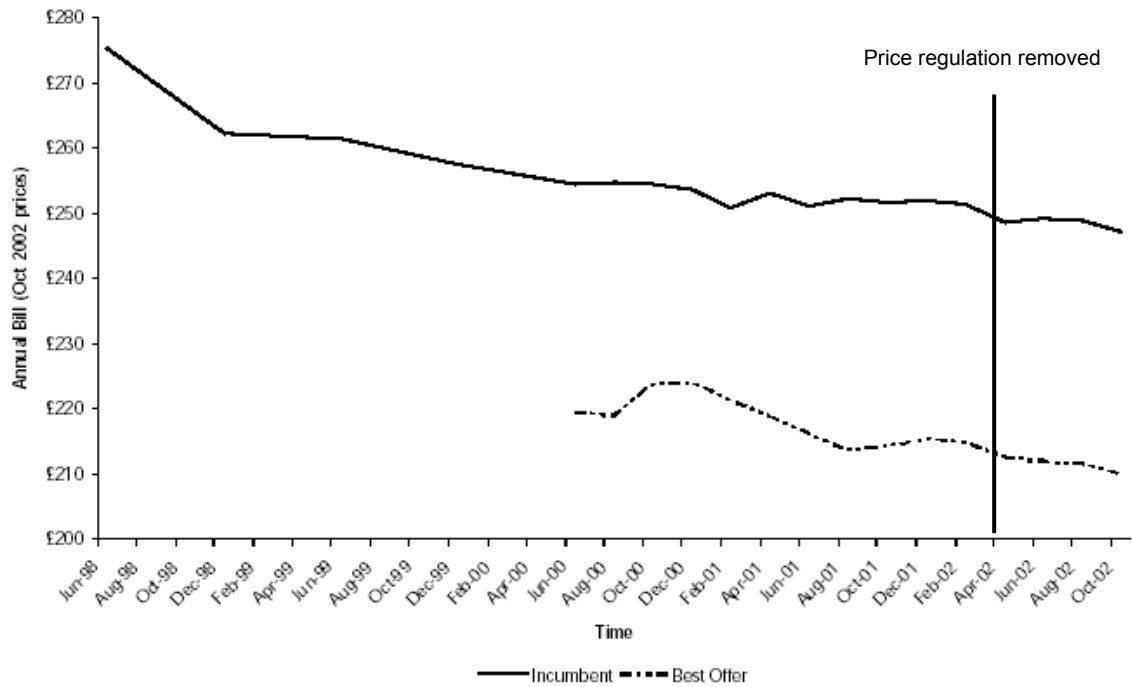
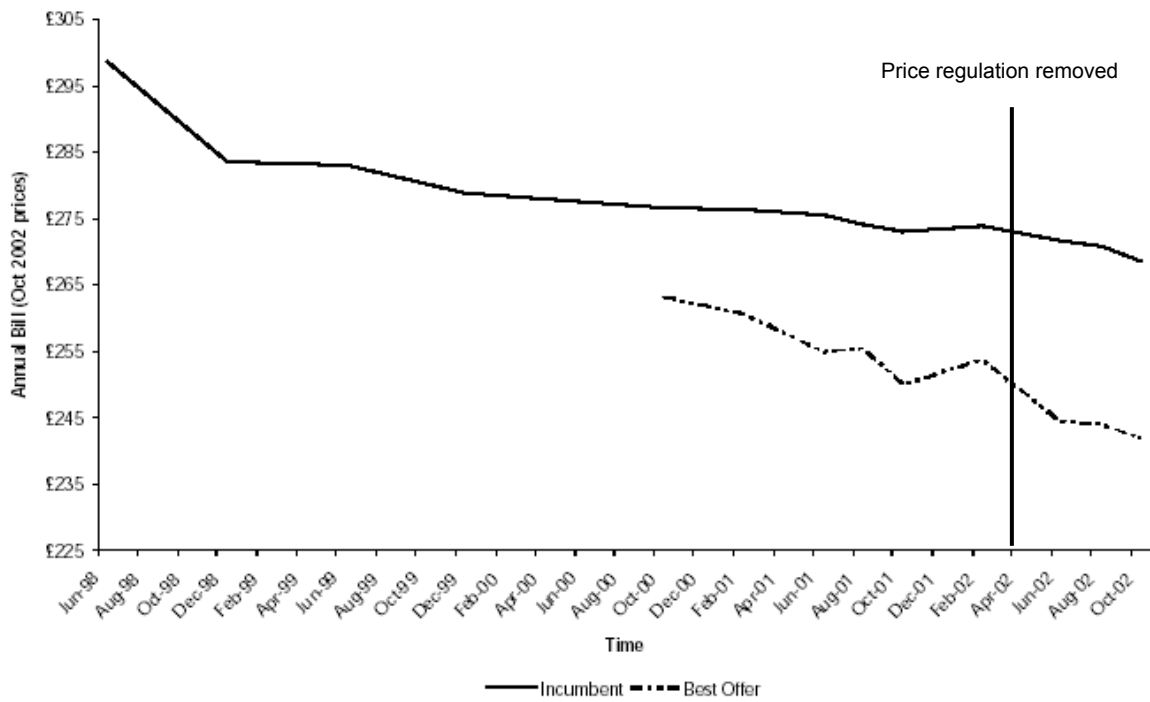


Figure 6: Domestic prepayment electricity bills since competition



7.2 New Zealand

In general terms NZ has applied a light handed form of regulation to its electricity industry.¹¹⁶ This involved the use of general competition law, general consumer protection law and the threat of direct regulation to influence the behaviour of the industry.

NZ was one of the first countries to introduce full retail competition (i.e. down to the domestic customer level) in its electricity industry. Retail competition down to the level of the domestic customer has been permitted since April 1993. NZ took a different approach to the introduction of retail competition to that subsequently used in other countries.

The NZ approach involved removing the franchise restrictions for small consumers first (i.e. those using less than 0.5 GWh per annum). This was done to avoid the possibility that domestic customers might face higher prices as a result of cross subsidisation, if larger customers (for whom competition was expected to be stronger) had access to competition first. In April 1994 the franchise restriction on all other consumers was removed.

In practice, however, very few domestic customers took the opportunity to switch retailers because it typically required the use of an interval meter. In July 1998 the NZ Government announced a package of reforms as part of the *Electricity Industry Reform Act 1998*. This required the corporate separation of network and energy businesses and the development of low cost switching arrangements to enable consumers, for whom interval meters were not yet an economic alternative, to change retailers. As a result, deemed profiling was introduced in April 1999 along with a switching protocol. The introduction of profiling resulted in competition becoming more widespread.

In the early stages of competition, NZ experienced some technical problems with the introduction of competition. These included delays and errors in switching, unwarranted disconnections and incorrect billing.

7.2.1 Awareness

The NZ Government sponsors an internet based electricity comparison branded as 'Powerswitch' and operated by a not-for-profit organisation 'Consumers Online'. The web site allows consumers to key in their relevant details and obtain estimates of their electricity bill from different retailers. The website also contains information on how to switch, consumer rights, tariff options and customer complaints.

¹¹⁶ This section focuses on electricity because the domestic gas market is small (eg. in 2001 natural gas consumption comprised about 9% of domestic energy consumption).

7.2.2 Industry concentration and vertical integration

The introduction of competition and the reforms in the *Electricity Industry Reform Act 1998* led to a rapid consolidation of the industry. Over 1999 and 2000 the number of retailers fell from 40 to 11. Currently there are around nine electricity retailers with a mixture of public and private ownership. Retailers vary in size in terms of the number of customers they serve, with the five largest retailers serving over 90% of the market.

Vertical integration took place at the same time that concentration occurred. Following the requirement for an ownership split between retail and networks in 1999, most generation companies purchased retail businesses partly as an opportunity to hedge themselves in the wholesale market. Because NZ has nodal pricing in its wholesale market, and there are significant transmission constraints, wholesale prices can vary significantly between supply regions.

In the winter of 2001 wholesale prices moved substantially higher, putting pressure on those retailers who were not hedged either through financial contracts or through their ownership of generating capacity in their supply region. Following this incident, incumbent retailers appear to have consolidated their customer base where they own generation capacity and reduced their selling activity in other regions. In at least one instance, two retailers exchanged customers in order that each retailer could be better hedged. We also understand that some retailers have actively discouraged customers from signing up in regions where they are not hedged.

7.2.3 Pricing

Table 8 indicates that since the introduction of profiling in April 1999, customers have on average been offered a 4-8% discount on the incumbent retailer's prices. The price discounts provide no evidence of any loss of competition as a result of industry concentration or vertical integration.

Table 8: Electricity price discounts¹¹⁷

| | <i>Average retail charge - incumbent</i> | <i>Average retail charge - cheapest</i> | <i>Incumbent / cheapest difference</i> |
|------|--|---|--|
| 1998 | 13.58 | 13.58 | 0% |
| 1999 | 14.06 ¹¹⁸ | 12.91 | 8% |
| 2000 | 14.12 | 13.13 | 7% |
| 2001 | 13.93 | 13.22 | 5% |
| 2002 | 14.46 | 13.86 | 4% |
| 2003 | 15.40 | 14.27 | 7% |

In 2000 the Government noted that consumers “*have suffered from continuing increases in the fixed charge elements of the power bill. This impacts more severely on smaller consumers, especially low income consumers.*”¹¹⁹ This resulted in a Low Fixed Charge tariff policy, which encourages electricity companies to offer at least one tariff with a low fixed charge.

7.2.4 Non-price offers

The 2000 Inquiry into the Electricity Industry¹²⁰ indicates that in some parts of NZ prepayment meters had become a widespread means of assisting low-income consumers. For example, around 10–12% of Orion’s customers were on pre-payment meters. However, it was understood that at the time retailers were withdrawing their prepayment meters. The Government therefore introduced a requirement for retailers serving more than 25% of customers in a supply area to offer prepayment meters at reasonable cost.

Dual fuel offers are becoming increasingly common, but limited by the limited reach of the natural gas network.

Customers are sometimes offered a prompt payment discount.

¹¹⁷ Ministry of Economic Development, www.med.govt.nz

¹¹⁸ It is interesting to note that prices increased by about 3.5% in the year following the introduction of competition. We do not know if this was due to changes in wholesale prices.

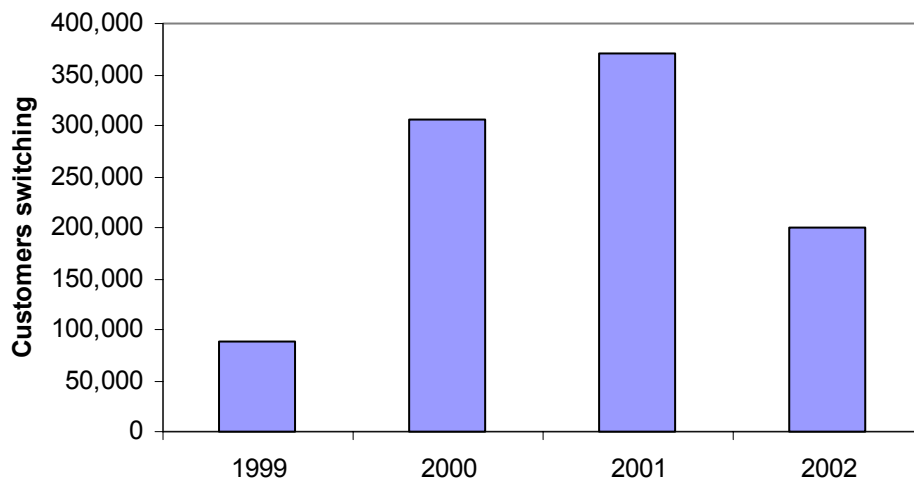
¹¹⁹ Ministry of Economic Development, ‘Power to the Consumer’, October 2000.

¹²⁰ Ministry of Economic Development, ‘Ministerial Inquiry into the Electricity Industry’, June 2000, pages 52-53.

7.2.5 Customer switching

Since 1999 there have been over one million customer transfers (there are about 1.8 million electricity customers). Figure 7 shows that the number of customers switching per annum since effective competition was introduced in 1999, which peaked in 2001. It is estimated that the average market share of incumbent retailers is currently 83%.¹²¹

Figure 7: Number of electricity customers switching annually in NZ¹²²



7.3 United States

We have relied on a published paper¹²³ to examine retail competition in the United States.¹²⁴ In some instances, regulated retail prices have been set below competitive wholesale market prices. One reason for this is that some utilities have regulated generation costs. Another reason is that, in some States, regulated retail prices were frozen for several years, whereas wholesale market prices have risen.

Massachusetts

Massachusetts was the first State to make retail competition available to all customers in March 1998. By December 2002 only 2.4% of residential customers had moved to a non-

¹²¹ ebenchmarking Ltd. 'New Zealand Domestic Retail Electricity Price Study', Prepared for the Electricity Networks Association, October 2003.

¹²² New Zealand Electricity industry website. www.nzelectricity.co.nz/C1aChoice.htm

¹²³ Paul Joskow. 'The difficult transistion to competitive electricity markets in the U.S.', MIT, July 2003.

¹²⁴ The paper excludes an analysis of California.

incumbent retailer. Since retail competition has been available, the regulated tariff has often provided electricity at a price below the wholesale market price.

New York

Residential retail competition was phased in by utility service area and by July 2001, retail competition had been extended to all residential customers. By December 2002, 5% of residential customers had moved to a non-incumbent retailer. Currently there are few, if any, non-incumbent retailers. Most non-incumbent retailers that were active in New York initially have now exited the market or are not actively marketing to residential customers.

New Jersey and Maine

Retail competition for residential consumers in New Jersey and Maine began in November 1999 and March 2000 respectively. By December 2002 almost no residential customers had moved to a non-incumbent retailer. Since retail competition has been available, the regulated tariff has been below the comparable wholesale market price. Currently there are few, if any, non-incumbent retailers. Most non-incumbent retailers that were active in New Jersey initially have now exited the market or are not actively marketing services to residential customers.

Pennsylvania

Pennsylvania provides an interesting example of the interaction between changing wholesale market prices and regulated prices. Table 9 indicates how the non-incumbent market share has changed between January 2001 and January 2003. Except for Duquesne, all of the utilities buy and sell power out of the same wholesale market (PJM). Yet each of them has a different regulated retail price reflecting the different levels of their regulated retail prices prior to the introduction of retail competition.

Those with the highest market shares (Duquesne and PECO) had high-regulated retail prices and significant stranded costs prior to the implementation of retail competition, compared with the other supply areas. Over time, the fraction of residential customers in Pennsylvania served by non-incumbent retailers declined significantly. This reflects the fact that as wholesale prices rose after the default prices were set, and retailers realised how costly it was to serve residential customers, they raised their prices or withdrew from the market.

Table 9: Non-incumbent market shares in Pennsylvania

| <i>Utility supply area</i> | <i>Non-incumbent market share – January 2001</i> | <i>Non-incumbent market share – January 2003</i> |
|----------------------------|--|--|
| Allegheny Power | 1% | <1% |
| Duquesne | 32% | 25% |
| GPU Energy | 6% | <1% |
| PECO Energy | 17% | 6% |
| Penn Power | 6% | <1% |
| PPL | 2% | <1% |

Ohio

Retail competition began in Ohio in January 2001. Of the five utility supply areas, three have had almost no switching and two have seen 55% and 24% of customers move to a non-incumbent retailer. Once again, this is reflective of the level of regulated retail prices. Another reason for the high switching rates in two supply areas is that Ohio has a municipal aggregation program that allows municipalities to purchase power on behalf of customers within their municipal boundaries. About 90% of customers served by a non-incumbent retailer are actually served through municipal aggregation programs.

Texas

Retail competition began in January 2002. By the end of 2002, over 6% of residential customers had switched to a non-incumbent retailer. Whilst prices have fluctuated through 2002, it appears that typically customers could access between a 6-14% discount on the regulated retail price.

7.4 Conclusions

The international experience with energy retail competition has the following implications for the effectiveness of retail competition:

- Switching rates from incumbent retailers in competitive domestic energy retail markets would appear to be highly correlated to price reductions offered by competing retailers. Table 10 summarises the best price reductions offered and average annual net switching from incumbent retailers for a number of jurisdictions. This implies that in a price-regulated market, switching rates as a measure of the

effective of retail competition are largely dependent on the amount of “headroom” provided by regulated prices.

Table 10: Comparison of price reductions offered and net switching rates for domestic customers in different jurisdictions

| <i>Jurisdiction</i> | <i>Best price reduction offered</i> | <i>Net switching from incumbent retailers</i> | <i>Average annual net switching from incumbent retailers</i> |
|---------------------|-------------------------------------|---|--|
| UK | 8-14% | 33% over 3 years | 11% |
| Texas | 6-14% | 6% over 1 year | 6% |
| NZ | 4-8% | 17% over 3 years | 6% |
| Victoria, Australia | 6% ¹²⁵ | 4% over 1 year ¹²⁶ | 4% |
| Massachusetts | Negligible | 2.4% over 5 years | <1% |
| Maine, New Jersey | Negligible | <1% over 3 years | <1% |

Well-known energy economist, Paul Joskow, says that:

“The evidence from England and Wales suggests that price reductions of 5% to 10% of the total bill are necessary to get significant customer switching for mass market (residential and commercial) customers. This is consistent with the limited experience in Texas as well.”¹²⁷

- Apart from NZ, all jurisdictions examined introduced retail competition for domestic customers with price regulation. Only the UK subsequently removed price regulation. Therefore, only the NZ and UK markets are relevant when considering the removal of price regulation;
- The NZ and UK (after price deregulation) experience demonstrates that, in those countries at least, competition was effective in limiting the capacity of incumbent retailers to raise prices. It is not obvious to us why NZ or the UK would be unique in this regard; and
- Whilst some problems with retail have emerged in NZ, these are largely a function of vertical re-integration, rather than problems with the retail market *per se*.

¹²⁵ Essential Services Commission. ‘Special Investigation: review of the effectiveness of full retail competition for electricity – final report’, September 2002, page 72.

¹²⁶ Based on the gross number of transfers for small customers - provided by NEMMCO. The net switching rate may be lower.

¹²⁷ Paul Joskow. ‘The difficult transition to competitive electricity markets in the U.S.’, MIT, July 2003, page 35.

8 Distortions in Australia's retail energy markets

This section outlines the distortions under which the retail energy market is operating and the likely implications for the activity observed.

Australia has the ultimate potential to have a single retail energy market with approximately 7.7 million domestic electricity consumers and 3.4 million domestic gas consumers. At the present time, however, we are a long way removed from that possibility.

Retail energy markets operate within a highly regulated context. To some extent this is an inevitable consequence of the way in which competition has been introduced and the complexity of the process.

It also has to be recognised that, until quite recently, governments have, in one way or another, sought to regulate the prices of a number of goods and services, which they have deemed to be "too important" to leave to the market (eg. petrol, milk, airline fares, airport fees). It still regulates prices in a number of areas (eg. post) and monitors prices in a number of other areas (eg. insurance, petrol). It would be realistic to assume therefore that some form of ongoing price oversight or monitoring is likely in the retail energy sector.

The regulated history of a number of products and, most importantly, the reasons why price regulation was removed (i.e. the distortions it created) is likely to be useful information in the debate on regulating retail energy prices. This is because it can serve to demonstrate what price regulation can do to the behaviour of the market.

Australia's retail energy markets currently operate within a highly regulated context that goes well beyond regulations necessary to ensure the market can function. The constraints under which the retail energy markets currently operate include:

- The lack of introduction of full retail competition in some jurisdictions;
- State based regulation;
- Mixed ownership;
- Price regulation;
- The application of price regulation;
- Distortions between markets;
- The way in which competition has been introduced; and
- The use of inappropriate tests of the market's effectiveness.

Those constraints need to be taken into account when establishing the criteria on which to judge the effectiveness of retail energy competition because most are likely to be distorting the market.

8.1 The lack of introduction of competition

The most obvious barrier to the competitiveness of Australia's retail energy 'market' is that it is not one market at all. The introduction of competition is being managed at the State level and has not yet been introduced in all States. This limits the size of the market.¹²⁸

The limited size of each State market is likely to constrain the level of product differentiation. For example, if it is only worth introducing a new tariff for a particular subset of customers if there are 50,000 to 100,000 customers, then it is less likely that a particular retailer will be in a position to introduce many new product offers in a particular jurisdiction.

8.2 State based regulation

The jurisdictions where competition has been introduced for all customers are regulated at the State level. This requires retailers to be licensed in each jurisdiction (often both for electricity and gas). It also requires them to comply with the terms and conditions of the licences and associated codes, which are not always consistent between jurisdictions and fuels.

This means that there is no national retail energy market but a series of State based markets. This reduces the size of the market and increases the compliance costs of participating in any particular market. As a consequence, instead of having a national market with potentially about ten previously incumbent retailers of significant size, we have a number of markets with a few major incumbents.

8.3 Mixed ownership

The current approach contains a mix of public and private ownership. In principle, ownership should not matter because generally it is assumed that the benefits of competition are a function of the incentives it creates rather than ownership *per se*.

In practice, however, ownership is likely to matter because it is unlikely to be feasible to replicate the incentives that are created by private ownership. In other words, there is always a risk that a publicly owned business either would be:

- "Required" to undertake activities that would not be undertaken by a privately owned business; and/or
- Adopt a different risk profile when competing to that adopted by privately owned business because they face different incentives.

¹²⁸ Wholesale market issues also currently limit the effective size of the market.

Even if this is not the case in reality, private operators are likely to perceive this to be a risk. This is likely to influence their decisions on which markets to compete in. For example, the NSW government has used its ownership of the NSW electricity businesses to introduce a mechanism that seeks to “remove” energy trading risk in a vertically disaggregated electricity system. To give effect to that objective, it has had to introduce a scheme (ETEF), which makes it harder for private retailers to replicate the risk position the state owned electricity retailers are in. This might partly explain the apparently limited entry into the NSW market by other retailers.

8.4 Price regulation

The most obvious and important distortion in retail energy markets is price regulation. In all jurisdictions where competition has been introduced, it has been introduced with price regulation. In other words, competition is being introduced at the same time as a mechanism that consumers can effectively use to “opt out” of the market.¹²⁹

In principle, price regulation itself does not necessarily create distortions. However, the only circumstance in which it is unlikely to create distortions is where the prices are set at levels that effectively make them redundant (i.e. true “safety net” levels). Given the purpose that governments are showing in regulating retail energy prices, it would be surprising if they were setting prices at redundant levels. In all other circumstances, price regulation will distort a market.

Price regulation is likely to be particularly damaging in markets (like retail energy markets) where price is one of the key variables on which retailers try to differentiate themselves. As the NSW Government’s Terms of Reference for Electricity Review indicates:

“International and national experience shows that the level of regulated retail tariffs relative to market based prices is the key determinant of how many eligible customers remain on regulated arrangements.”¹³⁰

Price regulation can distort competition in a wide variety of ways, some of which are more obvious than others. In most jurisdictions retailers have faced price regulation in the form of limits on the increase in average tariffs, and in the form of limits on the movement in particular tariffs.

¹²⁹ This paper does not address the distortions created by regulating retail prices, while deregulating wholesale prices. But this is likely to increase a retailer’s risk and encourage them to integrate back up the supply chain, if the wholesale market is limiting their opportunities to manage their risks.

¹³⁰ NSW Government, ‘Terms of reference for an investigation and report by the Independent Pricing and Regulatory Tribunal on regulated retail tariffs and regulated retail charges to apply between 1 July 2004 and 30 June 2007 under Division 5 of Part 4 of the Electricity Supply Act’, as reproduced in IPART, Review of Gas and Electricity Regulated Retail Tariffs: Issues Paper, October 2003, page 17.

The apparent reason for the first form of price cap is to limit the market power that retailers otherwise would possess. The intention therefore is to ensure retailers cannot earn any monopoly rents (i.e. to limit the average price).

To the extent that price regulation is effective in this task (and there is a high risk of it being either too effective or not effective enough), it means that retailers might not be able to provide the average level of price reductions necessary to encourage a significant number of customers to shift. To the extent this is the case, retailers are likely to respond by:

- Curtailing their efforts to win customers via price based competition; and
- Engaging in a variety of non-price based methods to attract customers that are either more attractive today, or might be the most attractive in the absence of price regulation.

This produces a predictable but damaging outcome. It is predictable because regulating prices is likely to result in less price-based competition. It is damaging because governments are mainly looking for this form of competition in assessing the market's effectiveness, and pure price competition is only one part of most retailers' competitive activity in any case. The lack of the "right" type of competitive activity then provides governments with plenty of "evidence" that the market is not effectively competitive – simply because, from their perspective, not much is happening. This would seem to be a classic example of how regulation can "create" the need for regulation.

The first type of price regulation, at least, leaves the retailer free to rebalance prices within the overall constraint to win the more attractive customers.

The second type of price regulation is, however, specifically designed to avoid cross subsidies being unwound by constraining the retailers' ability to offer meaningful price reductions to lower cost customers because they are unable to increase prices to higher cost customers.

The net effect is similar to that described above. Price competition is artificially constrained and non-price competition is artificially promoted. It produces an even more damaging outcome because governments are generally looking for competition to be "effective" for a wide range of customers before contemplating removing regulation (eg. before removing it for some customers). But price regulation is about the most effective tool imaginable to ensure this cannot happen. Again, it can therefore only provide more "evidence" of competition not "working".

The danger is that in their artificially promoted efforts to compete on non-price grounds for customers, some may engage in "undesirable" marketing behaviour. This is because retailers are likely to focus more on attempting to lure customers into contracts using all

means at their disposal other than price, particularly for those that would be the most attractive in the absence of price regulation.¹³¹

In its mildest form this is likely to involve the use of promotions (eg. win a prize). In its most extreme form it is likely to involve offers that purport to offer price reductions, but which only do so under certain circumstances. In other words, the benefits will be more apparent than real and offers will be more complex than they otherwise would be.

Conclusions

Price regulation, excepting where it is set at true safety net levels, can only distort market activity. Those distortions are likely to be producing outcomes that are not in customers' interests (eg. offers that are more confusing than they otherwise would be). Despite the obvious conclusion that governments are likely to draw in these circumstances (ie. that competition is not effective), the reverse is actually more accurate. It illustrates the market trying to find solutions, but under a set of artificial constraints. In other words, retailers will not stop trying to add value they will just try in different ways.

If retailers could provide customers with significant price reductions and still make acceptable returns, it is likely that marketing would be simpler and more straightforward than it is today. This is because the offers would largely sell themselves, particularly to price conscious customers.

This is important because there is a considerable degree of scepticism amongst stakeholders regarding the merits of retailers' activity in the market. There are, however, only a limited number of plausible explanations for why retailers might not be offering material price reductions to win customers:

- That price regulation is constraining them from doing so;
- They are either explicitly or implicitly colluding;
- They are incompetent and have not yet worked out that they can offer significant price reductions; and/or
- They know they can offer more significant price reductions, but do not believe that customers will respond to such offers in a way that will protect or add value for retailers.

It seems obvious to us which one of these explanations is most likely (the first).

The second explanation would be a very serious charge, but few who are questioning the performance of the market seem to be attempting to make it. If they continue to disparage the performance of the market, then they should be encouraged to formalise the reasons and take them to the appropriate authorities (i.e. the ACCC). In any case, it does not really

¹³¹ It might also require retailers to second guess how regulation might be removed.

explain why at least one retailer (either an incumbent or any other retailer) has not chosen to break ranks and offer serious price reductions.

The third explanation does not seem plausible because it would be in the interests of retailers to work this out (i.e. it implies that markets do not work).

The fourth is irrelevant (if it is true) because it would be a fact of life for this market (i.e. customers are ‘sticky’).

8.5 The application of price regulation

It is not clear that the prices set by regulators necessarily reflect the full value to customers of regulated prices. This is because those prices ignore the “option” value that may be associated with regulated prices.

That option value might be expressed in a number of ways. For example, price regulation can provide customers with a “free option” to stay on regulated prices, but move to market prices at any time in the future. A customer that moves onto a market contract may not have this luxury, at least without incurring a penalty. In other words, this option is unlikely to be provided in the competitive market.

Alternatively, customers might be able to rescind market contracts at any time at no cost but retailers might be able to change prices at any time. By contrast, regulated prices retain the same flexibility for customers but also offer a fixed price for a term.

Options are often quite valuable to customers, particularly when they are faced with making a decision that involves considerable uncertainty.

The most obvious method of resolving this problem (i.e. requiring customers to commit to regulated prices) has an obvious shortcoming (i.e. even less people might shift). However there may be an economic justification for allowing regulated prices to be higher than otherwise would be the case, to factor in the value of this option.

Valuing the option is likely to be difficult, but there is a possible proxy: the charges retailers and other similar businesses apply to customers who break market contacts. This amount should, arguably, be added to the price of all customers who choose to stay on regulated prices.

8.6 The way competition has been introduced

The market is likely to be constrained by the way in which competition has been introduced. Profiling is the most obvious example, but there are others (eg. in relation to metering services).¹³²

Retail competition was introduced to achieve the benefits that competitive markets provide. One of the key benefits competitive markets provide is cost reflective pricing (or allocative efficiency).¹³³ Interval meters are the only technology capable of providing cost reflective pricing corresponding to the settlement period.

However, at the same time when retail competition was introduced to expose customers to market prices, a mechanism was also introduced (i.e. profiling) that allowed market participants and most customers to avoid those price signals. Indeed, profiling provides those customers who have the most to lose from cost reflective prices with the mechanism to avoid being exposed to those prices. Typically, competitive markets do not provide such an “opt out” option.¹³⁴

It could be argued that this opportunity to “opt out” of the market is not a problem. This is because profiling encourages customers with a flatter load profile to use interval meters, merely to avoid paying for customers with a peakier load profile. It therefore potentially creates some price related competitive pressure. Indeed, in principle, as flatter load profile customers move off profiling, the profile becomes more cost reflective.

However, the customers remaining on the profile are likely to be a combination of high peak users and consumers whose consumption is too low to justify an interval meter.

This would create a barrier to competition if customers who are currently on profiling would see materially different tariffs if profiling was not permitted.¹³⁵ The energy prices paid by large users typically reflect their measured load profile. Amongst smaller users, any price differentiation between customers is likely to be much more aggregated, but might still occur. For example, there are other consumer markets where some such price differentiation appears to be occurring (eg. telecommunications and banking).

¹³² Prior to the introduction of competition in the ACT, New South Wales, South Australia and Victoria, the issue of whether consumers should be able to transfer retailers on the basis of accumulation meters with profiling was considered. Profiling provides the data necessary to perform wholesale settlement for each half-hour trading interval without requiring existing meters to be replaced with interval meters.

¹³³ Markets will do this within the constraints of customers’ willingness to receive more cost reflective pricing. In other words, where the costs of providing more cost reflective pricing (eg. the transaction costs it imposes on the customers and the provider) exceed the benefits, “cross subsidies” or less than perfectly cost reflective prices will be tolerated.

¹³⁴ Where they do, this option is unlikely to be free.

¹³⁵ This would imply that all customers would be required to install an interval meter. Such a move would need to be addressed based on a thorough understanding of the full costs and benefits.

It might be the case that profiling (by protecting all customers with the most to lose from interval metering) distorts the retailers' incentive to introduce more cost reflective tariffs because it restricts their ability to provide these aggregated offers. In other words, in the event that profiling was not permitted (i.e. all customers were required to use interval meters), retailers might be able to offer these tariffs. Profiling may therefore be distorting competition.

Certainly, public servants, regulators (eg. the ACCC) and market experts (eg. the Parer Report) have expressed the view that were interval metering to be introduced, customers would see more cost reflective prices than is currently the case. Customers would then be in a position to decide whether they would respond to these prices signals.

8.7 Inappropriate tests applied to the market's effectiveness

The way in which competition policy is being applied is also likely to create distortions. Reversing of the burden of proof in relation to retail energy markets is likely to create distortions both within the energy supply chain and with energy using equipment. This is because it is being applied in a different way in the retail energy market to the way it is being applied in the generation market and in the markets for energy using equipment.

This is evident from the way in which regulators are assessing the effectiveness of competition. For example, the Victorian ESC has assessed the effectiveness of competition in the Victorian retail electricity market.¹³⁶ The ESC's report highlights the degree to which it tends to:

- Compare the Victorian retail electricity market to an abstract, theoretical alternative - perfectly competitive markets;
- Examine the market in *isolation* rather than compare it to the experience with competition in other similar markets, including overseas retail energy markets;
- Focus on market outcomes (eg. the link between price and cost) rather than market processes or activity; and
- Pay insufficient regard to the conditions under which competition has occurred (eg. under broad based, state based price regulation).

Most importantly, the basis on which it has made its decision is not clear. It uses a large number of indicators, but does not indicate the weight it has attached to each. On closer analysis, however, it is apparent that the regulator ultimately uses market performance and the perfect competition paradigm as the final arbiter of the effectiveness of competition in the market. For example, even where the regulator claims to be talking about effective competition, it is apparent what its preferred paradigm (i.e. perfect competition) is at crucial stages.

¹³⁶ ESC, 'Special Investigation: Review of the Effectiveness of Full Retail Competition for Electricity – Final Report', September 2002.

In its analysis of the framework it states that:

*“Competition is not an end in itself, but a means of achieving more efficient use of the community’s resources in the production, supply and consumption of goods and services. Effective competition contributes to this objective by forcing businesses to produce at **least cost** (our emphasis), to charge cost-based prices and to be innovative in product design and in service deliver.”¹³⁷*

In its analysis of market performance it states that:

*“The Commission has not been able to conclude that competition is already imposing sufficient discipline on retailers to ensure that prices **reflect efficient costs** (our emphasis), service variety and quality generally reflect the preferences and requirements of consumers, and that consumers are well informed about their market choices for the entire market.”¹³⁸*

The ESC makes only a few vague references to overseas markets and almost none to similar markets in Australia. This compares rather starkly with its approach in an equally controversial area, attempting to estimate the cost of capital for network business. In that context, the ESC is on the record as putting a very strong emphasis on objective market evidence. It has previously argued in that context that:

“primacy be given to objective information from the capital markets where that evidence is available.”¹³⁹

The ESC spends a considerable amount of time trying to second-guess market outcomes (eg. the focus on market structure and performance), rather than looking for *prima facie* evidence of competitive processes or activity, without making value judgements on the worth of that activity. It devotes relatively little attention to the conditions under which competition has occurred (ie. under price regulation).

8.8 Possible distortions between markets

It is possible that price regulation in the small user segment of the market is distorting competition in the non-regulated segment of the market.

If all retailers were earning above market returns in the regulated segment of the market (as some claim), some might look to win greater market share in the unregulated market (by pricing closer to marginal cost in that market). Evidence that retailers were choosing to focus on the regulated market might be evidence that there were extra profits to be made, as would aggressive entry into that market by non-incumbent retailers.

¹³⁷ Essential Services Commission, Special Investigation: Review of the Effectiveness of Full Retail Competition for Electricity-Final Report, September 2002, page 18.

¹³⁸ Ibid, page 77.

¹³⁹ ORG, ‘2003 Review of Gas Access Arrangements: Position Paper’, September 2001, page 41.

If all retailers were earning below market returns in the regulated segment of the market, some might try to recover some of these returns in the unregulated segment of the market. To the extent that the unregulated sector is highly competitive this would be difficult, but if incumbent retailers (with a similar problem) largely supply the market it might be more feasible. Evidence that non-incumbent retailers were focussing on the unregulated market might be evidence that they had a competitive advantage in this market segment.

The ACCC has made a similar point in defending its approach to regulating gas network businesses (ie. eliminating monopoly rents). It argues that it still has benefits regardless of where the rents are accruing in the supply chain, either because it encourages greater use or greater production.¹⁴⁰

To the extent that retail price regulation is setting prices too high or too low, it might be distorting competition in the unregulated segment of the retail energy market. If it is accepted that, absent regulation, a price differential of around 10% would emerge between incumbent's offers and those of the best available offer, then it suggests that regulated retailers may be earning less profit than they would otherwise. Alternatively, large users may actually be subsidising smaller users with price regulation in place.

¹⁴⁰ ACCC, 'Submission to the Productivity Commission Review of the Gas Access Regime', 15 September 2003, page 69.

A Stakeholders consulted

As part of this study the following stakeholders were invited to participate. Meetings were not held with those marked by an asterisk.

Government

| | |
|----------|--|
| National | Treasury |
| | Department of Industry, Tourism and Resources (DITR) |
| QLD | Office of Energy - Energy Consumer Protection Office (ECPO)* |
| | Department of Families |
| NSW | Treasury |
| | Ministry of Energy and Utilities (MEU) |
| | Department of Community Services (DOCS) |
| VIC | Department of Infrastructure (DOI) |
| | Department of Human Services (DHS) |
| ACT | Treasury |
| SA | Treasury |
| | Energy SA |
| | DHS* |
| TAS | Treasury |

Regulator

| | |
|----------|------------------------------------|
| National | National Competition Council (NCC) |
| QLD | Office of Energy* |
| NSW | IPART |
| VIC | ESC* |
| ACT | ICRC |
| SA | ESCOSA |
| TAS | OTTER |

Customer / Community Advocates

| | |
|----------|---|
| National | National Farmers Federation |
| | Consumers' Federation of Australia |
| | Australian Consumers' Association |
| QLD | QCOSS |
| | St Vincent De Paul Society |
| | Welfare Rights Centre* |
| NSW | Public Interest Advocacy Centre (PIAC) |
| | NCOSS |
| | Smith Family |
| | Energy and Water Ombudsman of NSW |
| ACT | Essential Services Consumer Council |
| VIC | VCOSS |
| | Energy Action Group |
| | St Vincent De Paul |
| | Energy and Water Ombudsman of Victoria (EWOV) |
| | Consumer Affairs Victoria |
| | Consumer Law Centre* |
| | Consumer Representative (Denis Nelthorpe) |
| | Financial and Consumer Rights Council |
| | Kildonan Child and Family Services |
| ACT | ACTCOSS |
| SA | SACOSS |
| | Adelaide Cental Mission |
| | Energy Industry Ombudsman |
| TAS | Anglicare |
| | TasCOSS |
| | Office of the Electricity Ombudsman |
| | Salvation Army |

B Current situation - retail competition and price regulation

The national electricity market (“NEM”) is the market for the wholesale supply and purchase of electricity in five Australian states and territories – the Australian Capital Territory (“ACT”), New South Wales (“NSW”), Queensland, South Australia and Victoria – together with a regime of open access to the transmission and distribution networks in those states and territories. Tasmania intends joining the market following completion of Basslink¹⁴¹.

Full retail competition was introduced into the electricity markets in NSW and Victoria in January 2002, in South Australia in January 2003 and in the ACT in July 2003. The introduction of full retail contestability in Queensland is subject to a review by the Queensland Government. Its current policy position is that competition will not be introduced until a net benefit to customers can be demonstrated.

Australian Capital Territory

- The *Utilities Act 2000* regulates the provision of gas and electricity (and water and sewage services) in the ACT;
- The regulator sets maximum default tariffs for small electricity customers (less than 100 MWh per annum) until June 2006 and small gas customers (less than 10 J per annum) until June 2004. Such tariffs allow customers to leave for negotiated contracts, and subsequently return to the default tariff.

New South Wales

- The Voluntary Pricing Principles agreed between the regulator and the incumbent supplier govern the default prices for small retail gas customers (less than 1 Terrajoule) to June 2004. The Government retains the power to issue a Gas Pricing Order under the *Gas Supply Act 1996*.
- Default electricity retail tariffs for small customers (less than 160 MWh) are in accordance with the Price Direction recommended to the Government by the regulator. The regulator’s recommendations are made in accordance with the price setting powers under the *Electricity Supply Act 1995*, which has a sunset clause of 30 June 2004.
- The Government’s current policy position is to continue to give customers the choice of regulated electricity prices. No specific statements have been made on gas pricing.

¹⁴¹ An undersea connection between Victoria and Tasmania.

Queensland

- Has not yet introduced competition.
- A Maximum Uniform Tariff is applicable to franchise electricity customers who elect not to (or are unable to) choose a negotiated market contract. The Minister sets tariffs in accordance with s90 of the *Electricity Act 1994*;
- Customers receiving the uniform tariff are served by their retailer under a default contract. The Interim Standard Customers Sale Contract applies, although the Government has undertaken some consultation upon a revised document.

Victoria

- The *Energy Legislation (Consumer Protection and Other Amendments) Act 2003* extends the consumer safety net for gas and electricity pricing to December 2004. In effect this provides for regulation of prices by the ESC to small customers (less than 160 MWh for electricity and less than 5 TJ for gas).
- A review of the safety net arrangements will occur in 2004. The ESC will play a central role in that review, which will focus on low income and rural users, and this will include a review of the “effectiveness of competition”.
- The Government’s policy position is that the safety net will only be lifted once it is satisfied that competition is robust and consumers are protected from unjustified price increases.

South Australia

- ESCOSA approves electricity prices to small customers under the provisions of the *Electricity Act 1996*. The current prices expire on 1 January 2004. ESCOSA will retain reserve powers for price regulation thereafter.
- The Energy Minister currently sets the maximum gas price for small customers until competition is introduced after which the arrangements will be the same as for electricity. The Governor will proclaim an expiry date of the price regulation powers when appropriate (presumably on the advice of the Government).
- ESCOSA proposes to monitor the effectiveness of competition for a recommendation of removal of price controls when competition is deemed effective.

Tasmania

- Has not yet introduced competition

- The electricity regulator under the *Electricity Supply Industry Act 1995* establishes maximum electricity prices applicable to tariff customers. Under the Price Control Regulations, the regulator may only declare an electrical service for the purposes of setting price controls if the entity has substantial market power in respect of that good or service and the declaration will promote competition, efficiency, or public interests.
- The regulator is currently undertaking a pricing investigation into the maximum electricity retail tariffs which will apply from 1 January 2004 to 31 December 2006;
- Price regulation arrangements for gas have not been finalised but a Tasmanian Government document entitled “Overview Paper on Gas Distribution and Retailing Legislative, Regulatory and Policy Framework” notes that a competitive retail gas market free of price regulation, will provide the greatest opportunity for the benefits of competition to flow through to consumers. Gas is not yet widely available in Tasmania.

In addition, most jurisdictions have mechanisms in place to protect particular customer groups. While an analysis of these mechanisms is beyond the scope of this paper, in most cases, they predate the introduction of competition and were put in place to achieve particular equity objectives.

C Retail price regulation in Australia's jurisdictions

Below we summarise the retail price regulation adopted in each jurisdiction where retail competition has been introduced for all customers.

ACT

For those small electricity customers (less than 100 MWh per annum) who do not opt for supply from a competitive supplier, the Government has announced that it will allow a three year transition period during which they can remain with their existing supplier, ActewAGL Retail. The Regulator has placed a revenue cap in respect of aggregate franchise tariffs.

| <i>Financial Year</i> | <i>Permitted Tariff Revenue Increase</i> |
|-----------------------|--|
| 2003/04 | CPI + 4.5% |
| 2004/05 | CPI + 0.5% |
| 2005/06 | CPI + 0.5% |

Any variations to individual component prices are subject to the regulator being satisfied that the prices contained in a price variation submission lodged by the retailer are consistent with:

- The need to protect the interests of consumers;
- The requirement for tariff structures to be economically efficient, where practicable;
- The promotion of retail competition.

NSW

The two constraints placed on electricity tariffs are:

- Regulated retail tariffs cannot increase by more than inflation on average; and
- From 1 January 2001 to 30 July 2002 no individual regulated domestic retail tariffs increased by more than CPI. From 1 August 2002 to 30 June 2004 no individual regulated domestic retail tariffs can be increased by more than CPI + 2%.

Victoria

In December 2002, the Government placed constraints on the average price increase of standing and deemed tariffs for electricity and gas for 2003. In addition, a further constraint required by Government is that the average annual bill for any consumer category will not increase by more than 5 per cent of the average rise allowed for the relevant retailer.

South Australia

In October 2002, the Regulator determined prices for each standing tariff component.