

14 September 2012

Secretary
Senate Select Committee on Electricity Prices
Parliament House
CANBERRA ACT 2600



Energy Retailers Association
of Australia Limited

To whom it may concern,

Re: Submission for the Senate Select Committee on Electricity Prices

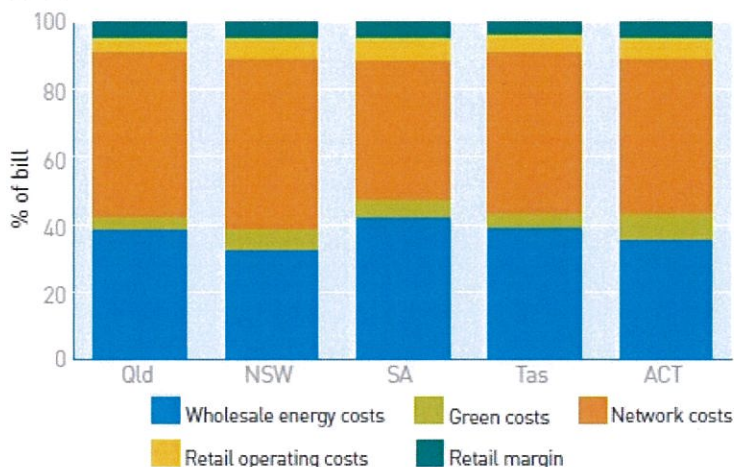
Please find attached the submission from the Energy Retailers Association of Australia (ERAA) to the Senate Select Committee on Electricity Prices. The ERAA is the peak body for retailers of electricity and gas in Australia and represents companies that serve more than 98% of Australian consumers.

The ERAA has not addressed all matters in the terms of reference, but those of most relevance to retailers' role as the custodian of the customer relationship in the electricity market. Specifically we have sought to comment on:

1. Recent causes of electricity price rises and likely future rises (Terms of reference – a).
2. Options for reducing peak demand (Terms of reference – c).
3. Investigation of mechanisms that could assist households and business to reduce their energy costs (Terms of reference – d – specifically d (i), d (iii), d (iv), d (v) and d (vii)).
4. Investigation of opportunities and barriers to the wider deployment of new and innovative technologies (Terms of reference – e).

It is important that Senators understand that retailers are the billing agent for the entire electricity industry value chain, meaning they bear much of the consumer backlash over rising electricity prices. Retailers have had very little influence over the causes of increases in recent years. This will continue to be the case going forward where rising prices are likely to be caused by renewable schemes, increased generator fuel costs and network charges.

**Indicative composition of residential electricity bills,
2011**



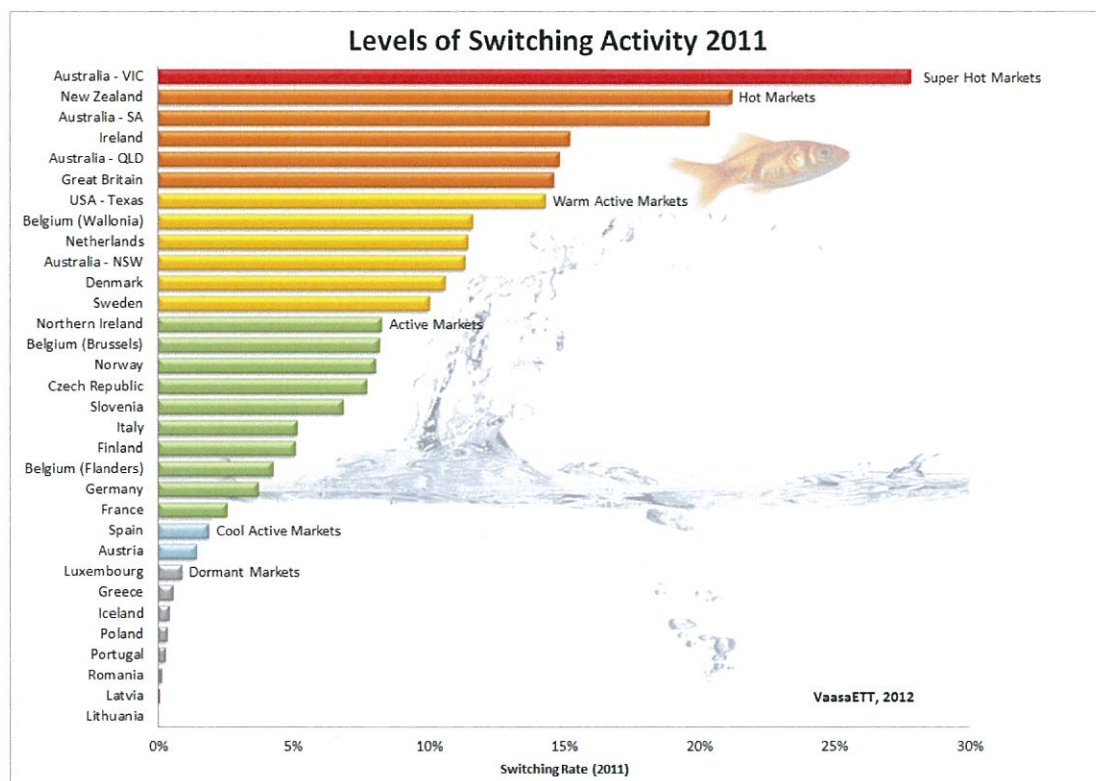
Source: AER State of the Energy Market 2011

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Energy Retailers Association
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The diagram above from the Australian Energy Regulator's (AER) State of the Nation Energy Report 2011, shows the retail component of a bill is a minor percentage of the end cost to the consumer. That said, retailers play a vital role for consumers in ironing out the volatility of our wholesale electricity market and in structuring products and arrangements to appeal to customers in a market in which customer switching rates are the amongst the highest in the world. This is demonstrated in recent research from global energy think tank VaasaETT (table below).



Retailers also bear credit risk for the entire electricity value chain - as we must pay generators, networks and the market operator as well as recovering our costs from the customer, mostly with a significant lag given the historical practice of quarterly billing. With rising prices, which have been caused by network charges and green schemes, we have seen an increase in consumer payment difficulties. Retailers help their customers through temporary payment difficulties with dedicated hardship schemes.

Overwhelmingly, energy retailers are private businesses of varying sizes and business models, operating in a highly competitive industry, we cannot be held responsible for overall issues of energy affordability. This is a matter for Government assistance programs at both the State and Federal level.

The major issue for retailers is that Government intervention itself is the major business risk in the form of retail price controls that continue to exist in all states other than Victoria. These distort price signals to consumers which are critical to future investment, suppressing innovation and competition in the retail energy market.

It is no coincidence that Victoria, where price regulation was phased out in 2009 in favour of price monitoring, is by far Australia's most competitive retail energy market with over a dozen retailers competing for customers and offering a broader array of products.

The ERAA sees Victoria as the template for the rest of Australia to follow. This is because competition and price monitoring - rather than distorting price regulation - protects consumers at a retail level, whilst providing the necessary investment signal for new generation. Since these arrangements have been in place, Victoria has not been adversely impacted in the reliability or affordability of electricity, compared to other states - where the Government continues to own parts of the industry and regulate retail prices.

The lesson from Victoria is that deregulation delivers the best outcomes for customers in terms of competition and innovation. Getting the market structures and regulatory framework right, ideally through implementation of the National Energy Customer Framework (NECF) at a retail level and effective scrutiny of the monopoly distribution and transmission parts of the electricity industry, will deliver long-term pricing outcomes at the retail level.

Environmental schemes such as the Clean Energy Future (CEF) package, the Renewable Energy Target (RET) and state feed-in-tariffs increase costs to consumers. This should be explained to consumers, by the Governments who choose to implement these schemes as part of the response to climate change. Where appropriate, direct assistance to affected consumers should also be provided, as occurred with the CEF package, although by not tying the assistance to rising utility bills the CEF package may still contribute to rising hardship in coming years.

Understandably, the average consumer does not understand the structure of our electricity industry or the causes of current and future price rises - they simply experience them through rising bills sent by energy retailers.

As custodians of the customer relationship, retailers accept the responsibility of communicating with their customers. We do hope that this inquiry will help in educating consumers that retailers are the agent for passing on costs over which they have little control and that trying to prevent this through retail price controls or price freezes is not in the best interests of consumers in the long-term. This is already the case in Western Australia where a decade long electricity price freeze has meant Western Australians have to pay significant subsidies to their electricity industry through higher taxes and charges.

Stopping necessary price rises is ultimately a doomed strategy - properly scrutinising policies and practices that may be contributing to price rises is not. For this reason, the ERAA welcomes the opportunity to contribute to the Senate Select Committee on Electricity Prices and would be happy to expand upon its views in person to the Committee.

Yours sincerely,

Cameron O'Reilly
Chief Executive Officer

Background

Over recent months, the electricity policy debate has focussed on the need to ensure network tariffs are efficiently set and to build consumer awareness of the impact that their energy consumption, particularly peak demand, has on the energy grid. The ERAA and its members have actively participated in a number of policy and stakeholder forums and support the Terms of Reference that will inform the Senate Committee on Electricity Prices.

Whilst we rely on submissions from our members to report on individual matters raised in the Terms of Reference, the ERAA would like to raise ongoing issues that the Select Committee may find of relevance in its inquiry. It is within this context that the ERAA provides the following comments to the inquiry.

Electricity prices

The recent spike in Australian electricity prices can be explained by two key factors. Firstly, increasingly inefficient investment in energy infrastructure, particularly distribution network capacity, to meet peak demand growth. Secondly, the uncoordinated implementation of policies to deliver environmental objectives.

1. Peak demand

Household peak demand continues to grow at twice the rate of underlying demand, largely due to the well documented increased use of air conditioning. The resulting higher demand peak has necessitated electricity grid reinforcement and the building of 'peaking' electricity generators – which in some cases are only required a few days a year. The costs of this infrastructure have been spread across all electricity customers in the form of higher prices. The recently released Commonwealth Government Draft Energy White Paper supports this conclusion arguing that:

- Growth in peak demand is leading to a need to augment the electricity network, and is a significant contributor to the expected \$38 billion in electricity network augmentation in the current five-year cycle.
- It is also a contributor to changes in the technology mix of electricity generation, driving recent investment in open-cycle gas turbine peaking plant with higher generation costs per unit of delivered energy. The costs to meet growth in peak demand are reflected in network and generation prices paid by electricity retailers, which feed through to rising retail electricity prices for consumers.¹

2. Uncoordinated environmental policy measures

The second contributor to electricity price increases is the range of uncoordinated policy measures which have been implemented to achieve environmental objectives, particularly aimed at greenhouse gas emissions reduction. This includes, but is not limited to the Renewable Energy Target (RET), various stated based solar feed-in tariffs, energy efficiency schemes and the introduction of the Clean Energy Future scheme.

¹ Draft Energy White Paper 2011: Strengthening the foundations for Australia's energy future. Pg.172.
Available at: <http://www.ret.gov.au/energy/Documents/ewp/draft-ewp-2011/Draft-EWP.pdf>

Increasingly, the components of electricity price increases, and their derivation, are becoming clearer to consumers. However, energy retailers are at the front line in dealing with the consumer backlash over rising electricity prices and find themselves having to explain, and justify, pricing trends over which they have little control.

Energy market reform

Energy market reform commenced in the mid-1990s on the back of the 1991 Hilmer Report has led to the introduction of competition in the supply of energy, the privatisation and corporatisation of energy assets and the deregulation of parts of the energy industry, particularly retail electricity prices. The commencement of the National Electricity Market (NEM) in 1998 delivered many benefits including improvements in productivity and lower wholesale energy costs.

Historically built in close proximity to coal supply, Australia's east coast electricity generation sector underpinned the industrial development of the country. The creation of the NEM and the linkage of state grids initially helped to improve the efficiency of our electricity generators as they were only paid when they produced. If there was excess demand in one state, it could often be met by excess supply brought in from another state. As the market began with an overall excess supply of generation, limited investment had to occur in the early years of the national market and prices were fairly stable.

Energy market reforms also led to utility companies being separated into discrete companies responsible for generation, transmission, distribution and retailing. One of the final stages of deregulation is the complete phasing out of regulated energy retail tariffs to ensure consumers get the benefits of full retail competition. The ERAA considers that without the removal of price regulation, the full benefits of the introduction of effective price signals and facilitative smart metering technology will be difficult to realise. These issues are further addressed below.

Price deregulation

Under the Amended Australian Energy Market Agreement (2006), the Council of Australian Governments (COAG) agreed to phase-out retail energy price regulation per jurisdiction where competition was found to be effective by the Australian Energy Market Commission (AEMC). With the exception of Victoria, every State and Territory government is yet to phase out regulated retail prices.

Victoria phased out regulated retail prices on 1 January 2009 following the advice of the AEMC that competition was effective. Since then, competition has developed strongly; offering customers more diverse and innovative energy products, and consumers can save on their power bills by shopping around.²

Retail price regulation is inefficient; it stifles product innovation, impedes price and service competition, and prevents the full range of benefits of competition from being realised. Competition offers the best form of protection to consumers, not setting retail price caps.

² Essential Services Commission 2009, Energy Retailers – Comparative Performance Report 2009-09, Summary of Findings, December 2009.

State and Territory regulators around the country have indicated that as the energy industry transitions to a low-carbon future, setting cost-reflective (as they are required under their terms of reference) regulated retail tariffs is becoming increasingly difficult.

Setting inaccurate tariffs could be detrimental to both energy retailers and consumers. If prices are set too high, consumers could pay too much for electricity, although competition from market contracts could mitigate this risk. If prices are set too low, retailers will be unable to recover costs and may discontinue operating in the market. Furthermore, there are documented dangers of price discounting to households when actual price rises are later applied.³ The distortionary impacts of retail price regulation were detailed in a recent article written by Dr Paul Simshauser from AGL's Applied Economic and Policy Research team.

The ERAA recommends that the Senate Committee considers this article in informing its inquiry. The following extract is of particular note:

*The case for price regulation in monopoly markets is clear, but its use as an artificial price cap in newly formed competitive markets transitioning from a monopoly requires much greater care. In contrast, price regulation ceases to have an economic function in effectively competitive markets, yet it represents a policy constraint in most NEM regions. Unfortunately, little effort has been made by policymakers to articulate the public policy objective of continued price regulation. In this context, this article contrasts two different approaches to the regulation of default tariff caps in intensely competitive retail electricity markets – a short run dynamic price approach, and a long run cost approach. Asymmetric information and the complexity of energy markets means that a regulator, no matter how wise and well resourced, could ever be expected to produce a reliable forward estimate of an efficient price in an intensely competitive market. Above all, relying on short run dynamics in an attempt to do so is completely incompatible with the manner in which the industry now facilitates the flow of investment and innovation. And if the flow of investment is disrupted, it will risk unwinding 15 years of market reform along with the presence of participant investment-grade credit ratings, the NEMs single largest asset in providing physical and systemic security. Using long run constructs on the other hand, particularly as a floor when setting artificial price caps, minimises the intrusion of regulatory policy constraints on the efficient operation of the market. Crucially, it accommodates the wide array of retail business models that currently exists in the NEM – the underlying source of the market's intensive competition.*⁴

Once all states commit to the deregulation of retail prices then this will facilitate the transitioning of customers onto Time of Use (TOU) tariffs that will shift consumption to lower cost time periods. This of course assumes that all customers also transition onto interval meters, the second restriction on retailers offering effective TOU tariffs.

³ Simshauser, P., Nelson, T. and Doan, T. (2011), *The Boomerang Paradox, Part I: how a nation's wealth is creating fuel poverty*, The Electricity Journal, 24(1): p72-91.

⁴ AGL Applied Economic and Policy Research (2012), Working Paper No. 33, *When does retail electricity price regulation become distortionary?*, Dr Paul Simshauser, at <http://www.aglblog.com.au/wp-content/uploads/2012/08/No-33-Regulated-Pricing.pdf>

Smart metering

Retailers support the implementation of smart metering. The benefits from smart meters and associated technology will have a positive impact across the whole energy chain, leading to cost savings that will be reflected in customer's energy bills. The ERAA recently released a series of papers on smart meter policy issues. These are:

- Realising the benefits of smart meters for consumers and industry (Working Paper 1)
- Managing smart meter rollouts and meter ownership to maximise competitive pressure and responsiveness to consumer needs (Working Paper 2);
- Competitive neutrality and the importance of ring-fencing monopolistic services from competitive services to ensure consumer benefit (Working Paper 3);
- Privacy of personal information and how appropriate use and disclosure of smart meter data can be provided for (Working Paper 4); and
- Third party and distributor sale of energy management services, and the regulatory changes required to ensure a consistent consumer protections regime and experience across different service providers, allow for consumer recourse in the event of any problems (Working Paper 5).

Working Paper 1, Working Paper 2 and Working Paper 3 are attached as Appendix 1, 2 and 3 respectively. The issues outlined in these papers are of significant importance to this inquiry, and the ERAA considers these appendixes as an essential part of our submission.

National Energy Consumer Framework (NECF)

The NECF is the last major component of the National Energy Market Reform Program which began in the 1990's and is expected to deliver benefits to both industry and customers. These benefits range from cost efficiencies that arise from the harmonisation of state based schemes, which will help manage rising energy prices, and consumer protection awarded under the NECF and not available in state based regulation.

Since the Ministerial Council of Energy decided in December 2010 that all jurisdictions would work towards a national NECF commencement date of 1 July 2012 our members invested significant resources and time to ensure that their systems and processes were NECF compliant by this date. As the majority of our members operate in multiple jurisdictions, it was expressed throughout the NECF consultation and implementation phase that any potential delays in states implementing NECF would have wide ranging ramifications to managing national systems.

As of the date of this submission only Tasmania and the Australian Capital Territory have adopted the NECF. All other states have delayed implementation due to various reasons. Whilst we appreciate the circumstances that may have resulted in these potential delays, our members have expressed concerns that they are still unclear as to whether these states will adopt the NECF and by when. Furthermore NSW, Queensland and Victoria have all indicated that through this interim phase, they intend to align existing state based regulation to the NECF. It is unclear though as to when they will achieve this, to what extent they will align their existing state based regulation to the NECF and what obligations retailers will be required to comply with throughout this transitional period. As retailers operate in a national market, all these unknowns create significant regulatory uncertainty for our members and increase the costs of serving consumers which will eventually need to be recovered.

Whilst the ERAA continues to work with regulators in each state to align codes to the NECF in the short term, we encourage the Select Committee's consideration of the cost impacts that the delay in a national implementation of the NECF has on the industry and consumers.

Energy efficiency

The ERAA acknowledges that energy efficiency policies may have a role to play in helping customers cope with higher energy prices. It needs to be noted however that these policies are ultimately limited in their capacity to address these rising energy prices because after all, it is consumer behaviour and the appliances consumers use in their household which determine how much energy they consume.

Energy efficiency ratings on appliances and the deployment of smart meters help consumers to know how much their appliances will actually cost them, rather than finding out later on through higher energy bills.

It is the view of the ERAA that any energy efficiency scheme targeted at low income households should preferably be addressed by direct government funding for programs tailored to suit the challenges of low income households. Specific issues and limitation in using an energy efficiency scheme to address low income household use are:

- A scheme is potentially regressive since the added costs incurred by retailers in complying with the scheme will be distributed across all energy users and energy bills account for a greater proportion of income in a low-income household. Energy efficiency policy comes at a cost which is eventually passed on to consumers through higher energy prices. The longer the scheme is in operation, the more expensive it becomes as the low cost energy efficiency options are gradually exhausted. Furthermore, administration and transaction costs are often overlooked; these have been estimated to be as high as 40% of the overall costs.⁵ These costs are passed on through higher energy prices, making the case for energy efficiency policies harder to justify.
- Low income households are generally already low-energy consumers and therefore have a limited absolute potential for energy savings.
- Low income households have a limited capacity to self-fund appliance upgrades to access further savings. Direct measures for low income households outside an energy efficiency scheme should be reviewed as a potentially more efficient option.

In Australia, our members are actively involved in delivering on the various state based schemes designed to encourage consumers to become more energy efficient. In addition to obligations prescribed under these schemes, many retailers provide energy saving information to help their customers better manage their energy consumption.

Where white certificate schemes and other similar energy efficiency schemes are already operating, policy makers should attempt to harmonise these schemes across state borders. Scheme inconsistencies across state-based schemes add to the compliance burden and administrative costs, which ultimately places more pressure on energy prices. White certificate schemes are not the preferred policy option for all retailers, but there could be resulting benefits in introducing a nationally consistent scheme, as opposed to having three

⁵ PWC November 2008, Review of energy efficiency policy options for the residential and commercial building sectors, PriceWaterhouseCoopers.

(or potentially more) discrete schemes operating at the one time. If there is to be a national white certificate scheme, retailers are in a good position to participate because they have already established customer relationships.

Ideally, this should be on an opt-in basis and there needs to be a wide range of energy efficiency options, rather than ones that are prescriptive and overly onerous. Any certificate scheme must be tradeable and allow retailers a choice of either conducting their own activities to generate certificates, or otherwise the option to purchase from the market in order to fulfil their liability.

Hardship provisions

At any one time there will be members of the community facing financial hardship. This can be either temporary hardship, where someone might be going through a difficult period, or chronic hardship, where people are indefinitely in a financially disadvantaged position. Energy retailers provide hardship programs for people who are having temporary difficulty paying for their energy consumption.

Energy retailers accept that some of their customers might not be able to pay their energy bills from time to time. To help these customers out, retailers have support mechanisms to assist customers to manage energy debt. These include payment plans, flexible payment arrangements and advice on how customers can save on their energy bills. While these might assist those in temporary hardships, these support mechanisms alone are not the solution to more chronic hardship.

Addressing energy hardship is a shared responsibility of governments, energy retailers, community groups and individuals. While energy retailers make efforts to identify and contact customers who are having difficulty paying their bills, they are limited in their ability to proactively identify customers who require support. It is ultimately up to the customer to engage with the retailer to advise of a need for support, and to then participate in their hardship support program.

The role of an energy retailer is not to administer social welfare policy: this is a core function of governments. Hardship is best addressed through comprehensive social welfare policies, because after all, if someone is having difficulty paying their energy bills, then they are also probably having trouble paying their other bills and debts. Recent increases in energy prices, largely driven by the need to invest in network infrastructure, will further add pressures on household bills and this should be met by the Commonwealth with additional assistance to households.

Price regulation is not an effective mechanism to protect people facing hardship. If the regulator sets the price of energy below what the market would set, a subsidy is effectively granted to all members of the community, not just the ones finding it difficult to pay their bills. As a result, competition in the energy market suffers and this has associated repercussions. Artificially restricting energy tariffs simply masks one of the symptoms of financial hardship rather than addressing financial hardship directly.

Competition offers the best form of price protection for consumers because retailers are competing to offer their customers the best energy products at market efficient prices. The only sustainable way in the long run to support people facing hardship is to have comprehensive welfare policies directly assisting those in hardship.

Appendix 1

Realising the benefits of smart meters for consumers and industry

ERAA smart meter Working Paper 1



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Realising the benefits of smart meters for consumers and industry

Energy Retailers Association of Australia (ERAA) smart meter Working Paper 1

Energy retailers are enthusiastic about the new ways the industry can meet consumers' needs via smart meters, particularly in the current environment of rising energy costs. Smart meters are replacing technology that is many decades old, and they will enable a long term digital evolution of consumer choice in the energy sector. Smart meters and associated communications technology provide a foundation for a new suite of retail energy products and services which enable real demand side participation in the energy market. This allows consumers to choose different pricing packages to suit their lifestyles, become better informed about their consumption and drive further innovation in energy service lines.

The benefits from smart meters and associated technology are not solely related to retail energy services, they will have a positive impact across the whole energy value chain. This includes allowing for better network planning, where distributors can work with retailers to develop energy products that reduce the burden on the network at peak times. Consequently, network augmentation can be delayed or reduced, thus reducing the impact of network charges on consumers' energy bills.

This paper provides an introduction to the benefits of smart meters, proposing several policy matters that the ERAA believes should be addressed if these benefits are to be realised. This paper is also the first in a series of papers released by the ERAA on smart meter policy issues, with further papers discussing:

- managing smart meter rollouts and meter ownership to maximise competitive pressure and responsiveness to consumer needs (*Working Paper 2*);
- competitive neutrality and the importance of ring-fencing monopolistic services from competitive services to ensure consumer benefit (*Working Paper 3*);
- privacy of personal information and how appropriate use and disclosure of smart meter data can be provided for (*Working Paper 4*); and
- third party and distributor sale of energy management services, and the regulatory changes required to ensure a consistent consumer protections regime and experience across different service providers, allow for consumer recourse in the event of any problems (*Working Paper 5*).

Consumer benefits from smart meters

Conventional electricity accumulation meters are usually read every three months, providing a consumer's retailer with one value for the previous 90 days' electricity consumption, which is generally charged on a flat rate. Remotely read interval meters (smart meters) change the availability of electricity consumption data from one value per 90 days to closer to 4,320 values in 90 days, as the meter stores the consumer's consumption data per half-hour. The availability of near real-time consumption data provides significant value to consumers and industry, as the information obtained allows consumer preferences to be better understood, and met, by retailers' products and services. As consumers learn about the cost of their energy

consumption in near real-time, they can change their consumption patterns to reduce their energy bills. This may include responding to cheaper times of day to use energy, or using load control products or targeted energy efficiency measures. Remote reading through wireless technology creates further benefit by improving bill accuracy and timeliness (and reduces consequential costs) through the elimination of estimated readings that sometimes occur with physically-read meters when the meter reader cannot obtain access to a property. Also, the cost to the consumer will be reduced by removing the need to have physical, on-site meter reading.

As energy consumers learn more about managing their energy use, they will change their expectations of the energy industry and will be proactive in demanding more from their energy service providers. Cost of living pressures, awareness of carbon costs, and increased use of digital technology will provide impetus for consumers to investigate and take up new products that help them understand and control their energy use. In the short term this might be limited to information only about household usage via devices such as in-home displays or Internet web portals, but in the medium to long term might lead to extensive use of time-of-use tariffs, load control products (where an energy service provider might cycle or turn off appliances in the home at peak times) and a greater uptake of small scale generation alternatives such as solar energy, and eventually battery power via products such as electric vehicles. In the longer term, the use of smart meters and new technologies will ultimately concentrate the power of choice on the consumer and empower them to control when, how and how much energy they want to consume, and which supplier or suppliers they want to source it from.

Looking to the future, we can expect energy consumers in ten years' time to be quite different from those today, with a focus on sustainability and energy-conscious lifestyle decisions:

The average Gen Y, Mr. and Mrs. Consumer will be in the middle of building their energy efficient house. Such a build will include insulation and design to maximize warmth during winter and minimize heat during summer. It will include at least two forms of self-generating renewable energy sources, with extra capacity-receiving grid input tariffs that neutralize all energy consumption costs. The home also will include smart devices that talk to the smart meter or Internet, and these devices will understand the time-of-use (TOU) consumption and feed-in tariffs that Mr. and Mrs. Consumer have heavily negotiated with their retailer. Using predetermined policies, and TOU tariffs, the devices will regulate energy consumption to minimize costs. They set and forget the daily management of these devices and instead rely on an energy portal that alerts them when normal energy levels are being exceeded and provides intelligence to suggest policy changes, different tariff structures or a different retailer.¹

It should be noted that vulnerable consumers will not be left out of the smart meter product suite: there is a real opportunity for all consumers to be better informed about their energy use and benefit from smart metering. Studies have shown that benefit from flexible or time-of-use products is not limited to specific consumer groups, and a study for the Victorian government that used actual consumer data found that vulnerable consumer groups have almost the same potential to benefit as the average electricity consumer.²

In the event that a consumer does not want or cannot benefit from a flexible tariff, smart meters enable clear consumption feedback and end the days of the “bill shock” that comes from an unanticipated high bill for the past quarter’s use. Retailers also already have hardship policies in place and work with consumers to provide assistance via payment plans and energy efficiency advice and assistance. The availability of

¹ IBM, (2011) *The Future in Delivering Energy to the “Smart” Consumer*, Andrew Weekes, at <http://public.dhe.ibm.com/common/ssi/ecm/en/euw03046usen/EUW03046USEN.PDF>

² Deloitte (2011) *Advanced metering infrastructure customer impact study: Final report*, for the Victorian Department of Primary Industries, 18 October. See <http://www.dpi.vic.gov.au/smart-meters/publications/reports-and-consultations>.

comprehensive data on consumption can only help retailers' processes to assist consumers in need and help target more appropriate means of supporting a consumer.

In summary, smart meters and associated technology provides near real-time feedback to consumers about their energy use. This opens up a new range of options for consumers to manage their energy costs and their overall energy consumption and should result in savings compared to basic accumulation meters. Studies have shown that smart meter programmes (with communications technology that provides clear feedback to consumers) have delivered energy savings of 5 to 15 per cent and sometimes even as high as 20 per cent.³

Industry benefits from smart meters

Smart meters not only deliver consumer benefits, they also benefit energy retailers and the energy industry as a whole. It is inaccurate to say that retailers only want to maximise consumption and so do not support smart meter technology and products. Retailers have moved well beyond such a characterisation, with several retailers selling solar systems (thus reducing consumption from the grid), and many more actively engaged in energy efficiency initiatives with their consumers. It should be recognised that there is value to a retailer in offering these products that can offset the lost value from lower consumption. Further, the financial gains to a retailer are more around how it manages its trading and contracts in the wholesale market than in the absolute units of energy sold.

In fact, the shift from once per quarter to half-hourly readings provides significant value for retailers, as they develop the right products and information resources needed to meet consumer choice, manage risk and debt more effectively. Further, the technology allows retailers to partner with distributors to offer consumers demand side management contracts for services such as direct load control. Accuracy of bills is also another benefit to industry as well as to the consumer. Estimated bills are problematic for retailers as they lead to bill inaccuracies and consumer dissatisfaction, which can also lead to complaints, as well as an unclear picture of a retailer's overall debt position. This unnecessary cost will be reduced when meters can be remotely read.

Realising the benefits: ERAA policy positions

Retailers support smart meters and are keen to explore new opportunities with consumers and distributors to share the benefits that flow from smart meter programmes. However, these benefits are not guaranteed: there can be a range of outcomes depending on the way that a smart meter rollout is introduced and the nature of the communications with consumers before, during and after a rollout. Given the often significant investment by the community in smart meter projects, the ERAA sees it as incumbent on policy-makers and the industry to maximise these benefits through best policy and practice. The following principles should be employed if this is to occur, where the detail of these positions forms the basis for the ERAA's further smart meter policy papers.

³ European Smart Metering Industry Group (ESMIG)(2009) *Empowering people for a better environment: A Guide to Smart Metering*.

1. **Smart meter rollouts should be consumer-focussed and retailer-led**

The full expression of consumer preferences in the smart meter space will take time to develop, which is reasonable given the paradigm shift required of consumers in understanding the changes and engaging with the industry. It is particularly important that consumers are at all times the focus of smart meter programmes through clear education and consumer-focussed product development. This means that smart meter rollouts cannot be seen as technical or infrastructure exercises only.

Reporting on findings from a comprehensive analysis of smart meter programmes and pilots covering over 450,000 residential consumers, industry expert VaasaETT says “The central difference we found between pilot success and failure is the ability of the program designers to meet consumer needs through the demand side program”. Success was not purely a technology matter, the technology was there to support to consumer engagement. As stated by the President of United States power company PG&E after the company undertook a smart meter pilot project in 2010:

*“We thought we were undertaking an infrastructure project but it turned out to be a consumer project”.*⁴

Experience to date clearly shows that if consumers are not engaged, and if a smart meter rollout is perceived as purely a costly imposition, the consumer benefits are unlikely to be fully realised.

This means that smart meter rollouts need to provide clear and consumer-focussed information and be as gradual as necessary to manage consumer concerns and provide time for customers to adjust. Best practices reveal that consumer education should start before smart meter deployment using a staged messaging strategy, leveraging internal education and community outreach to promote awareness and acceptance.⁵

Given retailers in the Australian energy industry are responsible for managing the consumer relationship, the ERAA is of the view that retailers are best positioned to manage consumer engagement. This is the only way to ensure that a smart meter rollout is not just an infrastructure project and have it meet consumers’ expectations and needs. International evidence shows that energy providers need to consider multiple channels when educating consumers about smart meters and associated products, attempting to influence consumers across all demographics in an informed and targeted way.⁶ Retailers are the only parties that can achieve this. Leading from this, the ERAA believes that market-led smart meter rollouts have the best opportunity to meet smart meter policy objectives, as we discuss further in *Working Paper 2*.

It is also important that the appropriate provisions are in place to separate services provided by the competitive market from services provided by monopolies and funded through regulated revenue. This is the fundamental premise of National Competition Policy and the energy market development to date, but it may need reinforcement in the smart meter environment, as discussed in *Working Paper 3*. Consumer benefit largely depends on the cost efficiencies and innovation from competitive tension in service provision, and this benefit will not be fully realised where monopolistic infrastructure businesses manage or control a smart meter rollout.

⁴ VaasaETT (2011) *The potential of smart meter enabled programs to increase energy and systems efficiency: a mass pilot comparison*, Short name: Empower Demand, page 3.

⁵ 2012 State of the Consumer Report, Smart Grid Consumer Collaborative (USA) January 23, 2012, page 8.

⁶ IBM (2011) *The Future in Delivering Energy to the “Smart” Consumer*, Andrew Weekes, at <http://public.dhe.ibm.com/common/ssi/ecm/en/euw03046usen/EUW03046USEN.PDF>.

2. *Consumers should have a consistent experience and be covered equally by consumer protections and privacy law*

Smart meters and associated technologies have opened up perceived opportunities to businesses seeking to enter the household energy market, and a range of new service models have been proposed where third parties access consumer meter data and even provide battery (or electric vehicle) charging or load control services. A number of distributors are also suggesting that they should be able to compete to provide these services.

While retailers welcome the opportunity for further competition, ERAA members are concerned that the current regulatory framework is no longer appropriate for these new services. The National Energy Customer Framework and other state licensing frameworks only cover the distribution and sale of energy, not the provision of energy management services, which means that providers of these other services are not covered by this regulation and neither are their customers. For example, a customer of a licensed or authorised energy retailer providing electric vehicle charging will have recourse to the industry Ombudsman and a range of other rights in how they are contracted with, but that customer's neighbour under contract with a third party providing the same service will not. Retailers are concerned about the implications of this situation, as it does not promote equal treatment of consumers or of market participants.

Working Paper 5 addresses the issue of third parties and distributors in the new environment, recommending that the National Energy Customer Framework and other state licensing frameworks are amended to provide specific authorisations for certain service provider types. The ERAA proposes that the overriding consumer protection principle should remain, which is that regulatory frameworks should reflect community expectations about how consumers are supplied with an essential service.

Similarly, we note that there is inconsistency in how privacy regulation covers providers of these currently unregulated energy management services. The National Privacy Principles (NPPs) apply to all existing retailers and distributors, but they do not apply to businesses with an annual turnover of less than \$3 million. What this means is that there could be a range of parties seeking to use or disclose consumer information that will have access but not be held to the same standard as existing industry participants. This is likely to be of concern to the community as well, and it can be expected that privacy concerns will escalate as consumers become more knowledgeable about the capacity of smart meters and associated technologies and products. Working Paper 4 addresses privacy issues, leading to an ERAA position that all businesses handling consumer meter data should be subject to the NPPs, regardless of size, and this must be provided for by relevant governments.

About the Energy Retailers' Association of Australia

The ERAA is the peak industry body which represents the core of Australia's energy retail organisations. Membership is comprised of businesses operating in the electricity and gas markets in most Australian states and territories. Collectively, our members provide electricity to more than 98 per cent of customers in the national energy markets and are the first point of contact for customers of both electricity and gas.

Appendix 2

Enabling a market-driven smart meter rollout

ERAA smart meter Working Paper 2



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Energy Retailers Association of Australia

Enabling a market-driven smart meter rollout

Energy Retailers Association of Australia (ERAA) smart meter Working Paper 2

Introduction

This paper sets out how retailers could lead a rollout of smart metering to small customers without the need for government intervention, while operating in a competitive market and maintaining customer choice. The paper works through some scenarios to show how such a market-driven rollout could work and addresses some of the perceived issues and commonly asked questions from a competitive metering and services model.

The “market-driven” rollout model presented in this paper is very different to other rollouts experienced in Australia, particularly Victoria. The rollout is commercially led rather than due to a mandated or regulated undertaking. The model assumes that anyone could make a decision that installing a smart meter would result in benefits — customers; retailers; distributors; meter providers; third party service providers. However, the retailer as the Financially Responsible Participant for a premise is the party that coordinates the installation of the meter and the provision of meter services, such as meter reading. It is important for the prudential stability of the electricity market that retailers are ultimately responsible for the metering arrangements at a premise. A meter does not just determine the customer bills but settlement between the retailer and the market, and the commercial arrangements between the retailer and the network. Determining who is responsible for, and who can own, the meter is important to the operation of the market and to innovations that benefit customers.

The key advantage of the model is that competitive metering means better outcomes for customers, such as lower costs and better services without a requirement for a government mandate. As a result, it reduces the political risk to government.

ERAA’s policy position — smart technology in the energy retail market

The ERAA and its members support the implementation of smart metering and consider that smart meters have an important role to play.¹ Some of the benefits that the ERAA and its members see in smart metering include:

- The ability to provide customers with more accurate and timely bills;
- Reducing customers’ exposure to ‘bill shock’ by increasing customer billing cycles;
- Helping customers better manage and understand their energy consumption and costs; and
- Allowing customers to choose new and innovative products and services.

¹ Energy Retailers’ Association of Australia 2012 Smart Technology in the Energy Market, Position Paper, January 2012, www.eraa.com.au

However, the ERAA believes that any decision of policy makers to support exclusive control of smart metering (for example, by distributors in Victoria) is inconsistent with the original principles of electricity reform and national competition policy and that this approach poses a significant risk to competition in energy retail markets.

Retailers are well-placed to deliver smart metering to customers, including residential and small business customers. Competition between retailers underpins the incentives that retailers have to roll out smart meters to their customers and to deliver the range of services and products that customer want at a price they are willing to pay. As it is delivered through a competitive market, a market-driven roll out of smart meters avoids the inherent difficulties and imperfections of network price regulation.

A market-driven rollout also ensures that the meter specifications are based on the smart metering services that customers want and provide the flexibility for retailers to develop new products and services for their customers. Distributor-led roll outs are typically focussed on the needs of the distributor and not necessarily about the enabling technology that delivers what the customer wants. Mandated distributor-led rollouts creates the potential for customer needs to be secondary to industry needs, alienating the customer, and making the customer feel as though they are paying for something they did not ask for (as has occurred in Victoria).

Drivers of a market-driven rollout

Competition and the ability to reduce operational costs and inefficiencies are the key incentives that retailers have to roll out smart meters to customers, including residential and small business customers. The potential to offer customers the benefits of smart meters can provide a retailer with a competitive advantage. A retailer that rolls out smart meters first can offer new and existing customers a range of energy information and management services. As a result of the first retailer's initiative, other retailers will be incentivised to offer the benefits of smart meters to new and existing customers to protect market share and also grow market share at the expense of retailers that are not so willing to innovate.

The other incentive that retailers have is that smart meters allow retailers to access significant internal operational efficiencies that can assist the internal business case on the rollout of smart meters. These efficiencies can include:

- Reduced exposure to wholesale and settlement risk as wholesale positions are more aligned to actual rather than net system load profiles;
- The automatic delivery of consumption data to retail operations allowing for more accurate reconciliation, settlement and billing capabilities;
- Better consumer analytics to assist in the development of new products;
- Lower meter reading costs as remote reads replace manual meter reads (including special reads);
- Lower disconnection/reconnection costs as remote de-energisation and re-energisation replace manual disconnections and reconnections;
- More accurate meter reads resulting in reduced back office costs;
- The potential to bill customers monthly and with actual rather than estimated meter reads reducing 'bill shock', bad debt write offs and associated ombudsman and customers complaints; and

- Assisting to reduce working capital requirements as cash flows improve as the time gap between when wholesale and network bills are settled and when customers' bills are paid is reduced.

The incentives that retailers have to roll out smart meters means that any roll out can be achieved without the need for regulatory or Government intervention. A market driven rollout will, by definition, occurs in response to consumers being ready and willing to have their meters upgraded in order to access better products. This means that the political risk to governments will be greatly reduced relative to larger scale mandated rollouts. Unlike a mandated roll out, as witnessed in Victoria, customer support for smart meters is shaped through the marketing of the smart meter services and the customer's explicit informed consent to a product choice that they see as reflecting benefit to themselves. If a product, or service, is forced upon a customer then the competitive nature of the market means that they will churn away to another provider. This is not possible in a distributor-led rollout where the distributor faces no risk of losing the customer.

Why retailers have not sought to undertake such rollouts in the past given the incentives that exist to do so

The barriers have been the regulation of manually read metering as a monopoly service provided by distributors and the bundling of metering charges in network charges.

At the inception of full retail contestability, regulating metering as a monopoly service was deemed to provide more efficient outcomes given the relative cost, volume and the local presence of distributors for small customers. However, exclusivity for the provision of metering services was originally introduced as a transitional measure to address issues of cost and complexity which would have arisen had competition for metering services been introduced simultaneously with full retail competition. It was anticipated at the time that exclusivity would expire at the end of the transitional period because of the view that metering competition would facilitate innovation both in terms of the type of meter installed and the way in which meters were read.²

Despite most retail markets now being fully contestable, many jurisdictions have not acted to remove the artificial barriers that prevent retailers from providing small customers with competitive metering services. Jurisdictions have extended exclusivity provisions beyond the point where the retail market has become contestable and, most importantly, metering charges for manually read metering have remained bundled in network charges.³

The bundling of metering charges in network charges is a significant barrier to retailers rolling out competitive metering services, including smart metering. If a retailer had replaced a householder's manually read meter with a smart meter, the retailer would still need to pay the bundled network charge. In other words, the network charge would not be reduced as a result of the distributor's meter being removed from

² Essential Services Commission (Victoria), Essential Services Commission of South Australia, Independent Competition and Regulatory Commission (ACT), Independent Pricing and Regulatory Tribunal (NSW), Office of the Tasmanian Energy Regulator, Queensland Competition Authority, 2004 *Joint Jurisdictional Review of Metrology Procedures: Final Report*, p. 41

³ It is worth noting that Essential Services Commission (Victoria) was the only state regulator to implement the recommendations of the *Joint Jurisdictional Review of Metrology Procedures* — that distributors should only have exclusivity for manually read metering and that metering charges be unbundled from network charges. However, the Victorian Government's decision to mandate a rollout of smart meters undermined the ESC's decision because retailers did not have time to take advantage of that decision before new regulatory barriers were created.

the premises and the retailer ends up paying for a service they no longer use. This materially impacts the business case retailers may have to rollout smart meters.

To address these regulatory failures, all remaining exclusivity provisions (including those in Victoria) must end and metering charges must be unbundled from network charges so that the cost of the existing meter can be identified and avoided if the customer chooses to take up a retailer's offer of smart metering services.⁴

How a market-driven rollout would work

To demonstrate how a market-driven smart meter rollout would work, we have set up some scenarios to show how smart meters can be managed in a competitive market.

In the scenarios, there is no government mandate to roll out smart meters — the decision to provide a householder with a smart meter is left to the competitive market to deliver through a market-driven rollout.⁵

Scenario 1: Suburban home without a smart meter

The *Householder* is a typical suburban residential customer who currently has a retail contract with *Retailer A*⁶ for the supply of electricity. The home has a manually read meter with all appliances in and around the home being supplied through that meter.

To take advantage of the market-driven drivers set out above, *Retailer A* approves an internal business case to replace the *Householder's* manually read meter with a remotely read smart meter.⁷ *Retailer A* engages with the following external providers:

- A *Meter Provider* to install the smart meter.
- A *Meter Data Provider* to manage the meter reading and deliver meter reads to the retailer, the LNSP and AEMO for settlement and billing purposes.

⁴ One issue that policy makers will need to address in dealing with these regulatory failures is the imposition of exit fees by distributors for the removal of the existing meter. Exit fees should be aligned with the early termination fee principles established by the National Energy Consumer Framework where early termination fees can be no more than a reasonable estimate of costs resulting from early termination. In terms of early termination fees for metering assets, this should be no more than the depreciated value of the remaining life of the asset and not replacement cost as the distributor is not being required to replace the asset.

⁵ This is the New Zealand model, comprising a retailer-led rollout within the context of a very highly competitive market.

⁶ *Retailer A* is a fictitious Energy Retailer for the purpose of demonstrating the role and activities of a Retailer in this scenario

⁷ For the purposes of these scenarios, the ERAA has assumed that it is the retailer that makes the decision that there is a benefit that can be obtained from rolling out smart meters. However, the market participant that takes this decision could also be a distributor, a meter provider or a third party service provider. For example, a distributor may wish to initiate a rollout of smart meters in its territory. The difference with a market-driven rollout is that the distributor would approach retailers in its area to manage and coordinate the rollout. This would include if a distributor wishes to replace an ageing accumulation meter with a smart meter — a distributor would need to engage with the retailer as the Responsible Person for the site to organise for this happen so that competition and innovation in smart metering is maintained.

The contract that *Retailer A* establishes with the *Meter Provider* and the *Meter Data Provider* requires the following:

- Both the *Meter Provider* and the *Meter Data Provider* retain accreditation with AEMO throughout the life of their contracts;
- The installed metering infrastructure and meter readings meet all technical and service level requirements in accordance with the National Electricity Rules (NER); and
- The *Meter Provider* and *Meter Data Provider* comply with any extra conditions that may be stipulated in their commercial contracts with *Retailer A*.

The *Meter Provider* carries out the meter change, allowing the *Meter Data Provider* commencement of remote meter reading and services as agreed under the commercial contract with *Retailer A*.

In this scenario, the *Householder* is still on their existing market contract with *Retailer A*, paying the same flat rate or two part tariff that they were paying prior to the meter change. However, the *Householder* benefits from additional services such as a sharp reduction in estimated reads (a primary driver of customer dissatisfaction), more timely billing and remote re-energisation and de-energisation, or perhaps the choice of an alternative flexible tariff facilitated by the new metering.

How has the meter change been paid for?

The costs to *Retailer A* of contracting with the *Meter Provider* to install the meter and the *Meter Data Provider* to read the meter will be offset to some extent (maybe even fully offset) by lower network charges that exclude distributor-provided metering and by the operational efficiencies from having the smart meter in place (as set out above in *Drivers of a market-driven rollout*). *Retailer A* may also factor in the additional earnings that it could make by selling the customer additional smart metering services.⁸

In rolling out a smart meter to the *Householder*, *Retailer A* will also naturally consider the competitive response of its rivals and the response of its customers. *Retailer A* will seek to provide the meter at least cost to the *Householder*. It would help the retailer's customer retention if a meter were provided without increasing costs to its customers. The driver — the need to maximise customer value or risk losing customers — is a key differentiator between a contestable retail market and the provision by a monopoly distributor

- *Retailer A*'s decision to provide the *Householder* with a smart meter and the potential for the new smart meter services it can offer the *Householder* may pose a potential competitive threat to other retailers who may decide to undertake similar roll outs to their own customers, or start to offer new services that compete with *Retailer A* using the new smart meter. *Retailer A* will seek to undertake its roll out at least cost to the *Householder* as a protection against new competitive entry into the smart metering services market.
- Alternatively, *Retailer A* may have overstated its business case for smart meters and the *Householder* may not be as attracted to smart metering services as *Retailer A* anticipated. If *Retailer A* increases prices to the *Householder* to recover the cost of the smart meter but cannot retain the *Householder* through the sale of associated services, then there is a very high likelihood that *Retailer A* will lose that customer to another retailer.

⁸ In developing a business case, a retailer will market test customers' willingness to pay for any new services and products the retailer may be able to offer, inclusive of any distributor benefits that the retailer may negotiate with the relevant distributor. If there is a positive willingness to pay, then this will assist the retailer in generating a positive business case for changing the metering arrangements in a premise.

The *Householder's* willingness to pay for smart metering services and the reactions of its competitors drives *Retailer A* to find the means to pay for the roll out while trying to minimise any cost increases for customers.

In summary, internal operational efficiencies combined with external competitive pressure are the drivers for retailers to minimise the costs of deploying smart meters. At the same time, the customer is better off because there are significant benefits available to the customer. For example, *Retailer A*, as a result of the smart meter deployment, can now routinely bill the householder on a monthly basis, and always with actual data – thus assisting the *Householder* with cash flow management, and greatly reducing the incidence and severity of “bill shock”. Given that the *Householder* was previously only billed on a quarterly basis, and sometimes on estimated data, this could be a significant enhancement to their customer experience.

How does the customer get access to the additional services provided by smart metering?

With the smart meter in place, *Retailer A* has an incentive and the ability to offer the *Householder* a range of new services and products enabled by the smart meter. These new services and products could include In Home Displays, smart-phone or tablet apps, web portals, demand management and a range of other services that assist the *Householder* manage their energy bill.

To obtain these new services, the *Householder* consents to enter into a new market contract with *Retailer A* for the delivery of energy and access to a range of new services and products after having considered the optimal mix of services they want and the price they are prepared to pay for those additional services. Of course, the *Householder* may elect to purchase no additional services over and above their basic energy contract – the challenge for *Retailer A*, as with any retailer in any competitive market, is to develop a product and service offering that its customers will be willing to pay for.

Scenario 2: Suburban home with a smart meter but customer switches retailer

This scenario builds on Scenario 1 by having the *Householder* deciding to change retailer, some time after the initial retailer (*Retailer A*) has already provided a smart meter to the *Householder*. The assumptions in this scenario are as follows:

- There is no government mandate for a rollout of smart meters.
- As a result of Scenario 1, the *Householder* now has a smart meter on the house. The meter is owned by the existing *Meter Provider* and the services from the meter are provided by the *Meter Data Provider* to *Retailer A*. These arrangements are based on a contractual arrangement between these two parties.
- The *Householder* has a market contract with *Retailer A* for the supply of energy and perhaps a range of additional services that they have consented to through the use of the functionality provided from their smart meter (such as access to a web portal and some use of load control services).

After some time (perhaps a year) on the new market contract with *Retailer A*, the *Householder* decides that *Retailer B* is offering a better deal and exercises their right to switch retailers. At this point, one of the customer benefits of the smart meter becomes apparent — the smart meter with its remote and on-demand reading capability enables the transfer between retailers to take place very quickly. This is because the final read before the transfer occurs can be performed at any time: there is no need to arrange (and pay) for a special on-site read or for the customer to wait for the next scheduled manual read date.

Further, in this scenario, the existing smart meter at the property supports all the services that *Retailer B* has to offer and thus there is no need to churn the meter.

How does the market manage this situation?

To manage the metering arrangements at the *Householder's* premises, *Retailer B* establishes its own contract with the existing *Meter Provider* to retain the smart meter provided by the existing *Meter Provider*. Again, this contract will require the *Meter Provider* to comply with the requirements in the Rules and to meet all relevant technical and service level specifications. (Note that *Retailer B* may already have a contract with the existing *Meter Provider* for the service of other premises and thus no new contract need be established. Instead, the existing *Meter Provider* is providing and managing the meter on behalf of *Retailer B* rather than *Retailer A*). *Retailer B* thus takes on the cost of metering at the property from *Retailer A* so that, in effect, the meter and meter services contract has shifted from *Retailer A* to *Retailer B*.

Retailer B has an incentive **not** to replace a technically functioning meter already installed at the house, because *Retailer B* would incur additional costs from doing so.

- Passing this cost on to the *Householder*, with the associated inconvenience of a technically unnecessary meter change, would make *Retailer B's* offer to the *Householder* less attractive and the *Householder* may naturally decide to stay with *Retailer A*.
- Even if *Retailer B* could absorb the costs of installing another meter, it would not make good business practice to do so because the existing meter already has the functionality that the *Householder* wants to use. It is cheaper for *Retailer B* to enter into a contract with the existing *Meter Provider* rather than replace the meter.

In 2005, the Australian Competition and Consumer Commission (ACCC) recognised that concerns that retailers would need to churn meters as customers churned were overstated:

The ACCC considers that concerns that meters will be removed in circumstances where it is inefficient to do so may be overstated, and that avoiding metering churn is not of itself sufficient reason to continue the metering derogations. The ACCC further considers that such concerns assume that retailers will tend to replace meters, irrespective of whether this is a commercially beneficial decision. It is likely that a rational retailer (that does not wish to create barriers to switching) will only choose to replace meters when it is efficient to do so. ... The ACCC considers that meter churn can also be a by-product of the adoption of innovative forms of metering and tariffs.⁹

Scenario 3: Suburban home with a smart meter but customer switches retailer and churns meter

In this scenario, after a year with *Retailer B*, the *Householder* decides to switch retailers again. This time, the *Householder* wants to contract with *Retailer C* who has demonstrated to the *Householder* that it has a range of new products and services that *Retailer A* and *Retailer B* cannot provide, perhaps due to the technical limitations of the existing meter. *Retailer C* is seeking to gain a competitive advantage over *Retailer A* and *B* by innovating and developing new products and services that it believes will be of value to the customer and the customer will be willing to pay for.

However, to access these new services, *Retailer C* must replace the existing smart meter with a meter that supports the new services being offered.¹⁰ This requires *Retailer C* to engage with an accredited Meter

⁹ Australian Competition and Consumer Commission 2005 *Applications for Authorisation: Amendments to the National Electricity Code*, Victorian Metering Derogations, P. 26

¹⁰ The ability to replace the meter for new services requested by consumers is important for innovation as customers move from a spectrum of being "uninformed" to "informed". Restricting flexibility in meter replacement will impede the market and constrain product and services development enabled by smart meter technology."

Provider that supports the new services the *Householder* wants. This could be the existing *Meter Provider* or another Meter Provider.

How does the market manage this?

- Now that Retailer B has lost the Householder, the contract with the existing Meter Provider will no longer apply. The existing Meter Provider does not lose any value from a stranded asset because meter providers incorporate the risk of stranding into the original prices that it agreed with Retailer B. It is also possible that Meter Provider may be able to re-use the asset in another premise, (e.g. another retailer may have won a new customer in a new housing estate and thus contracted with the Meter Provider to install the smart meter into the new customer's house).
- The cost of the new meter from Retailer C would be incorporated into the market contract to which the Householder would need to give explicit informed consent to enter into. Thus, the Householder must either be willing to pay for the additional functionality built into the new meter, or Retailer C must absorb these costs. If neither of these conditions holds, then the Householder has the option of remaining with Retailer B receiving the smart meter services the Householder was previously receiving (or indeed switch to a different retailer entirely). In this case, Retailer C will need to re-consider its proposition and business model because the market is telling Retailer C that customers are not willing to pay for its product – this is the reality of a competitive retail market.
- The cost of Retailer C's new meter would reflect the Meter Provider's view of the life of that meter. Thus the additional charge the Householder would pay would be an annualised cost of the meter. The Meter Provider would be likely to approach other retailers and market participants to promote its new meter, reduce the risk of it becoming stranded and improving its pricing and helping increase the take up of Retailer C's new offer requiring the meter. It is also possible that Retailer C may absorb at least some of this cost in order to acquire the new customer and make their product more appealing in the market place. This is a marketing and pricing decision for Retailer C.

What happens if the Householder decides it no longer wants the additional services provided by Retailer C and wants to switch back to the product it was previously on with Retailer B?

In this scenario, it would again make no economic sense for *Retailer B* to want to churn the meter unnecessarily.¹¹ The sophisticated metering that is at the premises is more than capable of delivering the services that customer now wants. Thus, as with scenario 2, *Retailer B* will contract with the relevant meter provider and meter data provider to meet its meter provision and data reading responsibilities under the Rules.

¹¹ The market could also accommodate a situation where the customer did not want to continue paying the annualised amortised cost of the smarter meter installed by *Retailer C* when the *Householder* switched back to *Retailer B*. *Retailer B* could organise with its *Meter Provider* to replace the smarter meter with the smart meter that was previously at the property. Thus, the customer would likely pay a lower amortised cost for the meter reflecting the lower technical capability of the metering device. However, as discussed later in this paper, the ERAA proposes that retailers agree to a no-reversion policy where this makes economic sense.

Scenario 4: Suburban home with a smart meter and services provided by a third party supplier

In this Scenario, the *Householder* has a market contract with *Retailer C* but has heard about the services offered by *Electric Vehicles*. *Electric Vehicles* is able to offer the *Householder* an electrical vehicle product and associated services. The *Householder* has a smart meter and enters into a contract for the services supplied by *Electric Vehicles*.

It is important to note that there is no need for any over-engineered 'solutions' to the metering arrangements at the house — there is no need for a second meter, a child meter or second NMI at the premises. As a result, the costs to the *Householder* of obtaining services from third parties such as *Electric Vehicles* is lower than if new or additional metering arrangements were put in place. This in turn can widen the appeal of these sorts of services to the customers.

How does the market manage this situation?

- As *Retailer C* is still supplying energy and smart metering services to the *Householder*, the contract between *Retailer C* and the *Householder* still applies
- The contract between *Retailer C* and the existing *Meter Provider* still applies
- The multiple registers contained in *Retailer C*'s smart meter already installed at the premises allow different loads to be measured separately and billed separately:¹²
 - Register 1 is used to measure the general load the *Householder* uses and is billed by *Retailer C*.
 - Register 2 is used to measure the load going to the electric vehicle and is billed by *Electric Vehicles*.

Thus the *Householder* receives two bills — one from *Retailer C* and one from *Electric Vehicles*.

- *Electric Vehicles* establishes a meter services contract with the *Meter Data Provider* for the site to deliver reads for settlement and billing purposes

This scenario can be applied in many ways. For example, the customer could have a contract for energy supply *and* a contract for electric vehicles with *Retailer C*. What is important in this scenario is that the smart metering technology is not a barrier. In fact, the smart meter is an enabler of new products and services and lifestyle choices for the *Householder*.

However, there is a requirement to develop a third party framework to ensure that there are sufficient customer protection arrangements in place to protect customers in their dealings with third party service suppliers. This could include some form of licensing/authorisation of these third party suppliers to ensure that there is adequate enforcement arrangements of the obligations to customers that these suppliers have, just as there are for electricity retailers.

Appropriate arrangements may also be required to ensure the financial integrity of the electricity market and that the operations of third parties do not undermine the financial resilience of the market.

¹² A minor change to network billing arrangements will be required to accommodate multiple registers in the meter.

Examples of market-driven rollouts of smart meters

There are examples of successful market-driven roll outs of smart meters, such as New Zealand where a market-driven roll out of smart meters to smaller customers, including residential and small business, has occurred.

In New Zealand, Meridian (the largest retailer in the South Island) took the lead in rolling out smart meters to its retail customers in the Canterbury area. Meridian's business case was based on achieving the savings from unaccounted for energy loss, manual meter read, meter leasing, automated disconnection/reconnection, reduced back office labour, reduced call centre volume from fewer errors and reduced non-technical losses. These savings equated to the costs of the new smart metering installation.¹³

In response to Meridian's initiative, other retailers have also commenced rolling out smart meters.

Rather than mandating a roll out, the Electricity Authority of New Zealand has focussed on ensuring that there is open and non-discriminatory third party access to metering services so that there are no barriers to competition whilst attempting to preserve the conditions for innovation among meter providers and retailers.¹⁴

There were initial implementation issues in NZ's market-driven rollout, primarily due to retailers rolling out meters before an appropriate supportive regulatory framework was in place. NZ found that, as has occurred under government mandates for a distributor-led rollout of smart meters in Australia, it is important that an appropriate legislative and regulatory framework is in place to support a market-driven rollout of smart meters.

Further information on New Zealand is found in Box 1.

Box 1: Smart metering in New Zealand

1. The New Zealand Authority determined in 2012 that the metering services market in NZ is "workably competitive", with multiple retailers, distributors and other parties obtaining metering services from competing metering owners/operators.
2. Regulatory intervention would likely hamper the efficient development and operation of the metering services market by diminishing the commercial and competitive incentives for efficient provision and procurement of metering data and services.
3. Commercial negotiations currently represent the most efficient approach for participants in the metering services market to obtain access to metering data and services for the long-term benefit of consumers.
4. Advanced Metering Services (AMS), owned by Vector, is the largest metering service provider in New Zealand, with about 42 per cent of accumulation and advanced meters. AMS is supplying 500,000 advanced meters for Genesis Energy, with about 250,000 advanced meters installed under that contract to date.
5. Meridian Energy, Mercury Energy, Trustpower and Contact obtain metering services in-house, from their own subsidiary Metering Equipment Provider (MEP) or from other MEPs. Contact agreed in late 2011 to use AMS to supply some metering services, and AMS is to deploy about 150,000 advanced meters for Contact in the North Island by 2014, starting in May 2012.
6. The Authority considers that a workably competitive market can involve duplication. MEPs that have made a poor technology choice or are unwilling to continue investing in a metering fleet should not be protected by regulation from being duplicated or displaced.

¹³ VaasaETT and EEE 2010 Country Reports: New Zealand

¹⁴ *ibid*

7. The key requirement (or barrier) for entry by a firm wanting to be an MEP or to access metering data appears to be obtaining the agreement of the consumer to install metering equipment (without interfering with other metering equipment).
8. Retailers have a clear interest in maintaining a competitive metering services market because retailers rely on MEPs to provide a good service so as to deliver the range and quality of service expected by their customers. Consequently, retailers have commercial incentives to make strategic procurement decisions so that they retain a choice of service provider. If service levels aren't maintained than an alternative MEP can be sourced. This decision relies on there being an alternative MEP able to offer the desired service at a price the purchaser is willing to pay.

Reference: <http://www.ea.govt.nz>

Facilitating a market-driven smart meter roll out

As noted, a market-driven rollout of smart metering requires an appropriate regulatory framework is in place to support that rollout. A number of factors need review including:

- The unbundling of metering charges from network charges so that retailers and customers are not required to pay twice for metering services;
- The discontinuation of any legislative barriers, such as metering derogations, that give distributors exclusivity over the metering arrangements for certain customer types;
- A no-reversion policy must be established which could be an industry agreement that metering installed at a premise is not removed in favour of less technically capable metering;
- Appropriate ring-fencing arrangements around participants in the market (distributors-retailers-meter providers) so that cross-subsidisation between participants does not undermine the competitive market;
- Open access arrangements that allow multiple parties to concurrently offer services across a single party's metering infrastructure;
- Appropriate B2B arrangements to facilitate the new metering arrangements; and
- Customer protection arrangements that support customer switching in a competitive metering market and their engagement with third party service providers.

The ERAA supports the view that the existing type 4 metering framework and metrology provide a sound foundation to support a market-driven smart meter rollout. This framework provides a minimum functionality specification and outlines the minimum service levels that the smart meters would need to meet.

About the Energy Retailers' Association of Australia

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Appendix 3

Competitive neutrality in energy service provision

ERAA smart meter Working Paper 3



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Competitive neutrality in energy service provision

Energy Retailers Association of Australia (ERAA) smart meter Working Paper 3

There are currently several types of business seeking to engage with consumers about smart meters and their benefits: distributors, retailers and third parties. The principle of competitive neutrality means that these service providers compete on a level playing field, where no party is able to take advantage of different or business-specific regulatory requirements. For example, distribution businesses are funded by regulated revenue and so have a natural competitive advantage. The concept of competitive neutrality demands that these parties separate what are considered contestable, market services from those that are rendered in monopoly markets. This is called 'ring-fencing', and it has been a core aspect of energy market reform as jurisdictional retail markets have opened.

The original energy market reform across the jurisdictions was carried out under the auspices of National Competition Policy, which embedded these notions of competitive neutrality and ring-fencing. However, recent industry changes seem to have neglected the principles of competitive neutrality and ring-fencing: a number of distribution businesses have argued that the paradigm change of smart meters and smart grids requires a more fluid industry position, and importantly, one that sees a reduced need for competitive neutrality and ring-fencing.

This paper explores the current debates around competitive neutrality and ring-fencing, arguing that decisions on the role of smart meter and smart grids technology that compromise these important principles compromise the long term objectives of National Competition Policy in their effect, which ultimately results in reduced market efficiencies and higher costs for consumers.

Policy objectives for service provision enabled by smart meters

The introduction of smart meters into Australian jurisdictional energy markets must be consistent with the framework and agreements of National Competition Policy, including structural separation of natural monopolies and contestable activities, competitive neutrality and access arrangements to the regulated monopoly infrastructure. The fundamental rationale of energy market reform was that it would maximise consumer benefits in the form of efficient prices, increase choice and enhanced quality of services. This rationale has not changed with the introduction of smart meter technologies.

This means that there should always be a level playing field for providers of energy services. It will not be beneficial to consumers to grant rights to monopoly service providers that are not extended to retail competitors. It is also not reasonable to require higher service standards from some service providers and not others providing the same services.

The current state of play

The current policy approaches to mandated smart meter implementation are not based on a cogent third party access model. This is likely to be a reflection of the fact that the policy debate has become captured by the notion that smart metering and smart grids are ends in themselves, rather than simply a means to deliver consumer benefits. The narrow focus on the role of new technology has provided the foundation for some market participants to suggest that competitive neutrality is no longer relevant, and that the roles of market participants should be changed. For example, the role of the distributors in Victoria to implement smart metering has created an impediment to market innovation, as retailers and third parties are not able to compete with distributors on a level playing field. This negatively affects the risk perceptions of parties seeking to enter the market, and may warrant the departure of some market participants. This is clearly not in the interests of consumers, nor would this pass the net public benefit test for costs involved in any smart meter infrastructure programme.

The alternative to this approach is to refresh market participants' understanding of competitive neutrality and ring-fencing, and to actively support regulators in this area. Ring-fencing is even more important in the current environment if we are to capture the benefits of the market and share these with consumers. Where distributors manage consumer meters for the market (through their contracts with meter providers), it is vital that the distributors provide access to the meter and meter data to ensure that consumers continue to benefit from competition. As discussed in *Working Paper 2*, ERAA believes that any smart meter rollout should be market-led, which means that no party will have a monopoly and the provision of all metering services are contestable.

Competitive neutrality should also underpin the provision of services via smart meters. A number of parties – including some distributors – have suggested that many smart metering services could be provided by a range of different entities without further regulatory intervention, which means that parties would be competing on unequal terms. The key services discussed are those that make use of a consumer's personal meter data to customise home management products and perhaps even turn off appliances (direct load control) as per a contract with the consumer. This is not a good outcome for customers if distributors undermine competition by funding the delivery of smart metering services through their guaranteed regulated revenue stream. It will result in reduced competition, reduced customer choice over the smart metering services they have available to them and thus lower consumer benefit.

The products and services that can be delivered through smart metering technology do not possess characteristics that would define them as monopoly products and services, such as declining economies of scale. The contestability of smart metering services and products has been recognised by the ACCC and NER.¹

¹ See page 85 of Accenture (2011) *IHD Inclusion into ESI scheme: Final Report*, for Department of Primary Industries, Victoria, December.

ERAA position

The ERAA considers that new technology should not be regarded as an end in itself and should not be used to alter the principles of energy reform and National Competition Policy which underpin the National Electricity Market. It is important to maintain the principles of separating natural monopoly and contestable components, competitive neutrality in pricing, and third party access to meters.

Regarding products and services to consumers, retailers should be the conduit for service provision, where this includes parties authorised to sell energy services as discussed in *Working Paper 5*. This means that distributors can also participate, but only where they are appropriately ring-fenced and are competing on equal grounds. Under the current market structure, retailers have built long term relationships with their customers, which translates in retailers' ability to develop products and services that meet consumer needs.

The public benefit test as outlined in National Competition Policy should be applied as part of any consideration of mandates or other exclusive arrangements applied by governments that restrict or potentially restrict competition. Any smart metering services provided by an entity related to a distribution monopoly business must be structurally and operationally separated from the regulated "poles and wires" business. This will ensure the distribution business does not gain any commercial, functional and informational advantages over other independent smart metering businesses.

While the ERAA does not dispute that demand side participation could help alleviate rising network costs and assist distributors better utilise their assets, the ERAA questions recent policy discussions that have supported distributors developing a direct relationship with customers to deliver demand side programmes in the contestable market. In principle, the ERAA considers that distributors should be able to shed or control consumer load in the case of emergency or safety requirement. However, where distributors seek to provide non-emergency load control and other forms of demand side participation to relieve the need for network augmentation for peak load (outside the applicable regulatory mechanisms) distributors should first go to the market and engage with authorised parties to deliver mass market demand side response programmes. If the market cannot deliver the desired outcome it is fair to then provide for a distributor to manage its risk as required, which may include it embarking on its own demand side management programme within the existing regulatory framework. However, it is appropriate to ask whether this is the best and most efficient approach.

Further, there needs to be strong enforcement regime, including regulatory incentives and penalties for any breaches of ring-fencing regulations. The recent AER review (December 2011) on the need for a nationally consistent ring-fencing guidelines is necessary and was welcomed by ERAA. It is also necessary for Australian Energy Market Commission to review and clarify the application of ring-fencing rules to the provision of smart metering services and examine the efficacy of the rules for emerging markets.

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