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Review of the Effectiveness of Competition in the Electricity Retail Market in the Australian Capital Territory: First Draft Report

The Energy Supply Association of Australia (esaa) welcomes the opportunity to make a submission to the Australian Energy Market Commission's (AEMC) First Draft Report for its review of the effectiveness of competition in the Australian Capital Territory (ACT) electricity retail market.

esaa is the peak industry body for the stationary energy sector in Australia and represents the policy positions of the Chief Executives of over 40 electricity and downstream natural gas businesses. These businesses own and operate some $120 billion in assets, employ over 52,000 people and contribute $16 billion dollars directly to the nation's Gross Domestic Product.

Over two decades federal and state governments and industry have worked to achieve a comprehensive transformation of Australia's electricity supply industry. Nestled within the broader context of national competition reform, the electricity reform program involved structural separation, privatisation and corporatisation, the creation of the National Electricity Market (NEM) in eastern Australia and the progressive introduction of retail contestability. Australia's electricity market reforms have been lauded internationally as creating one of the most transparent and competitive electricity markets in the world and a model for other countries.[1]

The ACT has played its part in this reform effort. As a founding jurisdiction of the NEM, the ACT now sources the majority of its electricity from the competitive national wholesale market and participates in the national governance framework set out in the Australian Energy Market Agreement (AEMA). Network regulation in the ACT has been transferred to the independent process administered by the Australian Energy Regulator (AER) and the impending National Energy Customer Framework will transfer non-economic retail regulation to the AER.

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[1] International Energy Agency 2005, *Energy Policy of IEA Countries – Australia*, OECD/IEA, p. 14.

Reforms to integrate and harmonise the ACT into national market and regulatory frameworks have been complemented by jurisdiction-specific reform to the retail sector, including the introduction of full retail contestability for all electricity customers and the instatement of a transparent and consultative process to set the transitional franchise tariff (TFT) conducted by the Independent Competition and Consumer Commission (ICRC).

And yet, despite these commendable advancements, the process of reform is not complete. Continued retail price regulation remains the key outstanding reform area preventing a genuinely competitive retail electricity market flourishing, in the ACT and across the NEM more generally. This is despite the Commonwealth, states and Territories acknowledging the importance of extending the electricity reform program to retail prices through the AEMA, under which jurisdictions have agreed to phase out retail price regulation for electricity where effective retail competition can be demonstrated. Where effective competition is not established, jurisdictions have agreed to take advice from the AEMC on ways to promote the growth of effective competition.

The AEMA reform process began promisingly with the AEMC's review of Victorian energy markets, which led to the Victorian Government removing price regulation from January 2009.[2] However, this initial momentum was interrupted by the South Australian Government's subsequent rejection of the AEMC recommendation for price deregulation in 2008, despite the finding of effective competition. Today with price regulation continuing unabated in all jurisdictions but Victoria, and governments continuing to show a propensity to involve themselves in retail prices, the Association is concerned that the commitment to removing price controls is waning.

Accordingly, the AEMC's current review of the ACT is welcome. It is a chance to inject some much-needed momentum into the faltering AEMA national retail price reform process and, with the New South Wales and Queensland markets scheduled for review in 2011 and 2012 respectively, a timely opportunity to throw some light on the adverse impact of price regulation on competition.

The message from the AEMC's draft report and the associated supporting research about the link between price regulation and competition is unmistakeable. As the retailer perspectives reported in the GA Research study indicate and the quantitative analysis of retailer margins by The Allen Consulting Group confirm, price regulation is a direct barrier to competition.

The AEMC's draft finding that retail electricity market competition for small ACT customers is not effective is therefore unwelcome, but not unexpected. As the Association has consistently argued over a number of years in submissions to governments, the AEMC, numerous jurisdictional regulator and government reviews, retail price regulation is a barrier to competition and an obstacle to the further development of Australia's electricity markets.

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[2] The Victorian Government retains reserve powers to regulate retail prices for electricity customers consuming less than 160MWh/year.

In the case of the ACT, there are two discernible links between retail price regulation and restrained competition outcomes.

Firstly, as elucidated by the retailer perspectives captured by GA Research, as well as in submissions to the ICRC's 2010 TFT setting exercises[3], the level at which the regulated price is set under the TFT deters retailers from actively competing for customers. If retailers cannot be confident of recovering costs incurred in acquiring customers (which the current regulation methodology makes no allowance for) and making a commercial return, the incentive to enter markets and compete for customers is diminished.

Secondly, and perhaps more fundamentally, the very existence of price regulation itself is a barrier to entry. The combination of fixed regulated retail prices, inherently volatile wholesale energy costs and notoriously thin margins means that retailers contemplating operating in a market under the shadow of price regulation expose themselves to the risk of error by jurisdictional regulators (an unavoidable risk given that the regulator is effectively required to predict the future pattern of wholesale energy prices) and the consequent financial and commercial implications. Importantly, however, the risks with price regulation in a contestable market are asymmetric. While prices set too low will stifle the development of competition (such as has been observed in the ACT), excess returns from regulated prices set too high would be eroded away by competition.

The damaging impact of price regulation on the structure, conduct and performance of the ACT retail electricity market is well documented by the AEMC and the supporting research for this review. A particularly telling indictment of the deleterious effects of price regulation on the market is the fact that while there are 19 licensed retailers, only four have small customers, only two are taking new customers, and just one is actively marketing. The retailer testimony in the GA Research report that one retailer is advising customers to return to the franchise tariff when their contracts expire as it is cheaper than they are able to offer keenly demonstrates the poisonous impact of price regulation on competition.

While the AEMC's research portrays an ACT market that is presently subdued, it also makes clear that the potential for vibrant retail competition exists. There are low barriers for new retailers to enter or exit the retail market as entry does not entail significant sunk costs or exclusive technology.[4] This means that with the right regulatory conditions, new entrant retailers could be expected to enter and supply electricity if incumbents were earning higher than competitive profits and 'squeeze' those profits out. With full retail contestability enabled in the ACT, and numerous retailers licensed and ready to compete, new entry or the threat of entry would bring competitive disciplines to a price deregulated ACT market. Indeed, this competitive potential in the ACT was evidenced by the ICRC's April 2006 recommendation that market conditions were sufficiently competitive to remove the TFT, a recommendation the ACT government failed to act upon at the time.

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[3] Available from http://www.icrc.act.gov.au/energy/electricity.

[4] CRA International, 2007, *The Effects of Retail Price Regulation in Australian Energy Markets*, Report to the Energy Supply Association of Australia, p. 53.

Retail competition would have positive benefits for the ACT and the NEM more broadly. Competition in retail electricity, as in other sectors of the Australian economy, provides incentives for businesses to improve service, develop products that meet consumer demands and find ways to lower their costs and to pass those costs on to consumers. As more new players emerge, or there are credible threats of new entry, the pressure to attract and retain customers intensifies. As demonstrated by high switching rates in other jurisdictions and the switching activity in the ACT prior to mid-2007, Australian electricity consumers are willing and able to vote with their feet when they see value.

The contrast between the dynamics of such market competition and administrative price setting is stark. While competitive markets naturally encourage prices to be efficient – that is, as low as is sustainably possible while businesses still make an appropriate return, retail price regulation is an inherently fallible and risk-laden exercise. The value of competitive markets in setting prices in Australia will become increasingly important in the coming years as the impact of climate change policies on the electricity market materialises. Competitive markets are far more capable of processing the complex impacts of climate change policies on supply and demand than a regulator and are more likely to find the most appropriate pricing structures and encourage competition in the development of alternative products and levels of service.

Abolishing the TFT will not only encourage competition for ACT customers by giving retailers confidence they can earn a commercial return if they are competitive. Dismantling the regulatory construct will be one step towards removing the artificial delineation between ACT customers and other NEM customers, significantly facilitating the decision to market retail electricity to a small use customer in the ACT.[5] In addition, it would save on regulatory costs for ActewAGL and other retailers and avoid the cost of administering the regulation, which the energy industry bears. Both these sets of costs are of course ultimately borne by customers.

esaa firmly contends that the regulated retail price for electricity in the ACT should be abolished and urges the AEMC to make such a recommendation in the second stage of its review. The Association does not consider that demonstrated effective competition at a point in time is a necessary prerequisite for an AEMC recommendation for price deregulation and hence maintains this position even if the AEMC confirms its draft finding of a lack of effective competition in its First Final Report.

esaa notes that there is an inherent bias in the AEMA process towards continued regulation, in particular, the emphasis on the AEMC finding effective competition as the first step on the path to price deregulation in clause 14.11(c)(i). However, esaa fears that adopting an approach where demonstrated effective competition at a point in time is a prerequisite to an AEMC recommendation to phase out price regulation is

[5] While removing the price regulation regimes would be constructive in promoting a genuinely national retail electricity market, even without price regulation a number of ACT specific factors will remain that retailers will have to accommodate, such as the requirement to implement the ACT's premium feed-in tariff regime.

flawed: it threatens locking the ACT in a circular policy trap where insufficient competition is used to justify price regulation, which further entrenches lack of competition through being a barrier to entry. How can the ACT market be expected to become competitive enough to justify removing price regulation if it is that regulation that is making it uncompetitive in the first place?

Under clause 14.11(c)(ii) of the AEMA, the AEMC is required to provide advice on ways to promote the growth of effective competition for those users that do not enjoy effective competition. Given that price regulation is the key barrier to competition, the appropriate response is therefore to remove price regulation.

It does not follow, however, that price deregulation means that the ACT Government should retreat completely from the field of play. Rather, governments can have an important role to play in supporting a deregulated market by monitoring the state of competition and importantly, supporting those consumers that find electricity prices unmanageable. Purposely-designed, budget-funded measures such as welfare payments are a transparent and equitable way to assist the more vulnerable members of the community to access energy rather than broad brush.

esaa looks forward to continuing to engage in the AEMC's ACT review. In light of the importance of price deregulation, the Association has compiled a report entitled *Unfinished Business: Retail Electricity Price Deregulation in Australia* that examines the impact of price regulation across the supply chain from a national perspective and its underlying drivers. With a program of competition reviews scheduled for the coming years, and the market entering a new period of uncertainty from carbon mitigation policy, this report is attached for the AEMC's information.

Any questions in respect of our submission or the attached report should be addressed in the first instance to Kieran Donoghue, Policy Development Manager, by email to kieran.donoghue@esaa.com.au or by telephone on (03) 9670 0188.

Yours sincerely

Brad Page
Chief Executive Officer

energy supply association of australia

Unfinished Business:
Retail Electricity Price Deregulation in Australia

Executive Summary

Over nearly two decades, Australia's electricity industry has undergone significant reform: disaggregation, privatisation and corporatisation, the creation of the National Electricity Market in eastern Australia and the Wholesale Electricity Market in Western Australia and the progressive introduction of retail contestability.

Against this internationally recognised reform achievement, the removal of retail price regulation remains the last outstanding big area of reform in all jurisdictions except Victoria. Despite a national process agreed to by all governments in Australia to remove price caps, momentum for reform is flagging.

As the 'cash register' for the entire electricity industry, it is paramount that retail prices are allowed to be set by the market to ensure that costs can be recouped from the end customer. This imperative is underscored by the current pressure on the cost structure of the electricity supply at the wholesale, networks and retail levels, including from climate change policies.

The foremost reason governments interfere in retail electricity prices appears to be their perception that voters consider electricity an essential service and therefore expect that governments will make sure it is affordable. This is despite the fact that electricity is just 1.9 per cent of the average household's weekly expenditure[6] and that governments do not set prices for other services commonly considered essential.

Retail price regulation has a number of negative impacts on the electricity market that will ultimately harm the long-term interests of consumers. It undermines efficient price signals, is a barrier to competition at the retail level and can undermine incentives to invest in generation. The effectiveness of climate change policies are and will continue to be seriously undermined if ongoing price regulation prevents the proper price signals from driving behavioural change in consumers and suppliers.

While price regulation can provide temporary relief to consumers from the costs of electricity supply, it is not a panacea: ultimately costs must be borne by someone – either by the electricity industry, other electricity consumers or taxpayers. The most efficient and equitable way to allocate costs is through market-determined prices.

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[6] Australian Bureau of Statistics, Cat. No. 6535.0.55.001, Household Expenditure Survey, Australia: Detailed Expenditure Items, 2003-04, table 2.

The experience with price deregulation in Victoria shows that the transition to price deregulation can be smoothly managed. The steps required are not radical and different jurisdictions have already made varying degrees of progress.

Governments can continue to support markets by monitoring the state of competition.

A deregulated retail electricity market with more cost-reflective pricing could lead to benefits to lower income households, for instance removing inherent cross subsidies between houses with and without air conditioning. On the other hand, it would lead to general price increases in some instances, particularly where jurisdictions have held prices below costs, and some consumers will inevitably find deregulated electricity prices unmanageable.

Consumers that find market price electricity unaffordable must be supported, but the burden should not be borne by the electricity industry. Instead, the protection of customers and the price of electricity should be maintained as two separate issues.

Purposely-designed, budget-funded measures such as welfare payments are a transparent and equitable way to assist the more vulnerable members of the community to access energy.

1. Electricity reform in Australia

More than two decades of reform have overhauled Australian electricity supply, transforming it from a state responsibility to competitive markets.[7] With reforms to the wholesale, network and non-economic parts of the retail sector locked-in, retail price deregulation is the last big, outstanding area requiring attention.

State-owned monopolies

The provision of electricity in Australia began in the 19th century, initially by a mixture of private and municipal suppliers. However, by the late 1940s, electricity supply in Australia was predominantly through state-owned, vertically integrated monopolies.[8]

Electricity supply was focussed on regional transmission networks that connected generation from major fossil fuel sites (such as the Latrobe and Hunter valleys) to cities and other load centres. State agencies were responsible for planning, developing, commissioning and operating these systems and state controls on tariffs were applied to most public electricity authorities.

However, microeconomic reforms of the electricity industry began to disrupt this paradigm during the 1980s in some jurisdictions with corporatisation of government-owned monopolies and the introduction of competitive neutrality reforms.[9] By the early 1990s a general consensus had emerged in Australia on the limitations of a monopoly, government-run electricity industry.[10] Jurisdictional electricity reform was integrated under the umbrella of the Council of Australian Governments (COAG) and incorporated in 1995 as related reforms to the National Competition Policy and the Competition Principles Agreement.[11]

The creation of competitive and national energy markets

In 1993 COAG took the watershed decision to create a competitive national electricity market spanning the southern and eastern states. The development of the National Electricity Market (NEM) involved the separation of the vertically

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[7] While the focus of this paper is retail electricity price regulation, three jurisdictions, all of which have full gas retail contestability, continue to regulate gas prices – South Australia, New South Wales and Western Australia. Many of the issues covered in this report apply equally to gas retail markets.

[8] Industry Commission 1991, *Energy Generation and Distribution, Volume 2: Report*, Report No. 11, p. 7

[9] Productivity Commission 2005, *The Private Cost Effectiveness of Improving Energy Efficiency*, Inquiry Report, No. 36, p.372.

[10] The emerging consensus on the benefits of introducing competitive market arrangements to electricity was consistent with the broader program of competition-based reforms to the Australia economy during the period. The main catalyst for this reform agenda was the 'Hilmer Inquiry.' Independent Committee of Inquiry 1993, *National Competition Policy*, Commonwealth of Australia.

[11] Independent Review of Energy Market Directions 2002, *Towards a Truly National and Efficient Energy Market*, Commonwealth of Australia.

integrated supply chain and then horizontal disaggregation to introduce competition between generators. State-owned businesses and assets were progressively corporatized and privatised[12], and the network elements, given their inherent natural monopoly characteristics, were brought under economic and access regulation to ensure open access at fair and reasonable terms.

The NEM commenced in 1998 covering Queensland, New South Wales, Victoria, South Australia and the Australia Capital Territory (with Tasmania joining in 2005 and the Australian Capital Territory subsumed into the New South Wales region from 2008). The NEM is a single wholesale market through which generators and retailers competitively trade electricity. It is physically linked by an interconnected transmission network spanning from Cairns in northern Queensland to Port Lincoln in South Australia and Hobart in Tasmania.[13] Since 1 July 2009 the NEM has been operated by the Australian Energy Market Operator, which is the single, national operator for both the electricity and natural gas markets.

Due to the distances involved, Western Australia is not part of the NEM. However, a similar market reform process has occurred with the inception of the competitive Wholesale Electricity Market in the South West Interconnected System following the vertical disaggregation of the vertically integrated state-owned monopoly, Western Power Corporation, in 2006.[14]

National regulation to support competition

The guiding principle of Australia's extensive electricity reform program was to transfer responsibility for supply from governments to markets. This saw centralised decision-making by governments replaced with decentralised, commercially-driven decision-making by private and corporatized entities.

However, governments have not completely withdrawn from the field. The competitive electricity market is supported by a governance and regulatory framework that has become increasingly national in character.

Following the COAG-commissioned 'Parer Review'[15], the Commonwealth, states and territories created the Australian Energy Market Agreement (AEMA) in 2004

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[12] Privatisation of the industry continues in 2010 with the New South Wales Government's electricity reform strategy involving the sale of the government-owned retailers and the rights to trade the output from government-owned generators. See http://www.nsw.gov.au/energy

[13] The state-based transmission networks have been progressively integrated through interconnectors. The Snowy Mountains Hydro Electric Scheme between New South Wales and Victoria was the first connection in 1959. It was joined by the Heywood interconnector between South Australia and Victoria in 1990 and two interconnectors between NSW and Queensland (Directlink and QNI) in 2000. In 2002 a second link between Victoria and South Australia, Murraylink, was opened. Tasmania became the last state to physically join the NEM in 2006 when the Basslink interconnector between Tasmania and Victoria became operational.

[14] Electricity supply in the Northern Territory remains the sole responsibility of the government-owned vertically integrated monopoly, Power and Water Corporation.

[15] Independent Review of Energy Market Directions 2002, *Towards a Truly National and Efficient Energy Market*, Commonwealth of Australia.

as the overarching document for national energy market regulation and reform. The Australian Energy Market Commission (AEMC) and the Australian Energy Regulator (AER) were also created at the time as the key national energy market institutions.

The current national governance framework comprises the Ministerial Council on Energy (MCE) providing high level policy guidance and the AEMC acting as the independent rulemaking body and custodian of the National Electricity Rules that govern the NEM. The AEMC also provides advice on the ongoing development of the market, such as on the resilience of energy market frameworks to the introduction of national climate change policies.

The AER's role is national economic regulator and enforcer of the National Electricity Rules. The AER monitors and regulates the wholesale electricity market and has taken responsibility from the states for determining access, revenue and prices for NEM transmission networks (since 1 July 2005) and distribution networks (since 1 January 2008). It also regulates the non-price elements of the retail sector and will expand its retail role under the National Energy Customer Framework that is currently under development. Broader competition regulation in the electricity market is enforced under the general responsibilities of the Australian Competition and Consumer Commission to the Australia economy.

Reforms to the retail sector to give consumers choice

The reforms to the wholesale electricity market and the network sector have been complemented by significant reforms at the retail level. These reforms have focused on giving consumers choice in their electricity supply.

The primary achievement has been the progressive institution of retail contestability. Full retail contestability extends the benefits of competition by giving customers, irrespective of their consumption level, the power to choose their electricity supplier. This means that companies must compete for the patronage of customers and is fundamentally different to previous arrangements that provided a government-mandated franchise customer base to retailers. Full retail contestability has been introduced in Victoria (2002), New South Wales (2002), South Australia (2003), the Australian Capital Territory (2003) and Queensland (2007).

However, full retail contestability is not yet universal, with competition prevented for customers below certain consumption thresholds in the other jurisdictions: 50 megawatt hours (MWh) a year in Western Australia, 150 MWh a year in Tasmania and at 750 MWh a year in the Northern Territory.[16]

[16] For reference, a residential customer consumes around seven megawatt hours a year on average. Independent Pricing and Regulatory Tribunal 2009, *Review of Regulated Retail Tariffs and Charges for Electricity 2010-2013*, Electricity – draft report and draft determination, p. 5.

Continued regulation of retail prices

Reforms to contestability at the retail level have not, in general, been matched by reforms to retail prices. While the market has been allowed to set prices for larger customers in some states, all jurisdictions other than Victoria maintain some form of price cap regulation. This applies even in cases where full retail contestability has enabled consumers to choose who they buy their electricity from.

The degree of price regulation varies across states and Territories. Differences include whether prices are set by the government or an independent regulator, the precise price setting methodology and the extent that prices are held below cost-reflective levels.

Generally speaking, price regulation applies to consumers below certain annual consumption thresholds in full retail contestability jurisdictions and provides a maximum regulated tariff. The thresholds are 160 MWh in South Australia and New South Wales, 100 MWh in the Australian Capital Territory and 150 MWh in Tasmania. In Queensland, Western Australia and the Northern Territory regulated tariffs are available to both small use households and large use business customers.

A national process for retail price reform

The importance of extending the electricity reform program to retail prices has been acknowledged by the Commonwealth, states and Territories by enshrining a process to remove price controls in the AEMA. Under the Agreement, the states and Territories agreed to phase out retail price regulation for electricity where effective retail competition can be demonstrated.[17] The AEMC was made responsible for reviewing the state of competition, with jurisdictions most likely to have effective competition the first to be reviewed.

The AEMA reform process began promisingly with the AEMC's review of Victorian energy markets, completed in February 2008. The AEMC found competition to be effective and recommended retail price regulation be removed for residential customers along with measures to support the change. This recommendation was enacted by the Victorian Government from January 2009.[18]

Faltering momentum

However, since then, momentum for retail price reform in Australia has flagged, with governments not showing enthusiasm to cease deploying their price setting powers. The AEMC's subsequent recommendation in December 2008 that retail price regulation is no longer required to protect customers in South Australia was rejected (see figure 1 below) and the timetable for AEMC competition reviews has

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[17] Clause 14.10 of the Australian Energy Market Agreement.

[18] The Victorian Government retains reserve powers to regulate retail prices for electricity customers consuming less than 160MWh/year.

slipped.[19] New South Wales has committed to retain retail price regulation until at least 2013 regardless of the outcome of their AEMC review and the Australian Capital Territory ignored a recommendation from its independent economic regulator that regulated franchise tariffs were no longer required.[20]

At the bureaucratic level, the machinery of regulation continues to turn, with regulatory pricing reviews occurring in Queensland, New South Wales, South Australia, the Australian Capital Territory and Tasmania producing controlled price paths for the next one to three years.

[19] The Ministerial Council on Energy agreed to request the Australian Energy Market Commission to commence its scheduled review of the Australian Capital Territory electricity market in 2010, with future reviews planned for New South Wales in 2011, Queensland in 2012 and Tasmania in 2013 if full retail contestability has been introduced in that jurisdiction by that time. Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia, p. 200.

[20] The Independent Competition and Regulatory Commission was asked by the Australian Capital Territory (ACT) Government to advise whether continuing regulated transitional franchise tariffs was warranted. In April 2006 the Commission recommended that from 1 July 2007 regulated tariffs be removed on the grounds that there was evidence that the retail market in the ACT was sufficiently competitive. However, retail price regulation continues in the ACT. Independent Competition and Regulatory Commission 2009, *Final Decision: Retail prices for Non-contestable Electricity Customers 2009-10*, June.

Figure 1: South Australia

On 16 April 2009 South Australian Minister for Energy, the Honourable Patrick Conlon, wrote to Australian Energy Market Commission chairman, Dr John Tamblyn, not accepting the recommendation for the removal of retail price control. He justified his government's decision on the basis that more than 30 per cent of small customers remained on standing contracts and that stakeholders had differing views on the effectiveness of competition.[21] While recognising that "the long term viability of retailers is important to deliver safe, reliable and cost-reflective energy over the longer term," he countered that the "existing framework for regulation is crucial to safeguarding the interests of the public during this current period of [CPRS and RET] uncertainty."

The South Australian Government's rejection of the Australian Energy Market Commission's advice raises doubt about the integrity of the Australian Energy Market Agreement process. Noting this, the Productivity Commission has called for the Agreement to be amended to clarify the process for follow up review of competition in those jurisdictions where an initial review has recommended the removal of price regulation, but that recommendation has not been accepted by the relevant jurisdiction.[22] In response, the Australian Government referred the matter to the Ministerial Council on Energy[23], which requested that the Standing Committee of Officials further consider the issue and come back to Ministers with advice.[24]

2. Cost structure of the industry

Retail prices are the 'cash register' for the entire electricity industry. Appropriate retail prices are therefore essential to ensure that costs from across the electricity supply chain can be recouped from the end customer. This is particularly important in the current environment since, as some draft pricing decisions have already shown, the underlying cost of electricity supply is increasing with multiple economic, policy and historical factors impacting all parts of the electricity supply chain (see figure 2).[25] These cost factors – categorised below as wholesale,

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[21] Letter from the Hon Patrick Conlon, Minister for Energy, to John Tamblyn, Chair of the Australian Energy Market Commission, received 16 April 2009.

[22] Productivity Commission 2009, *Annual Review of Regulatory Burdens on Business: Social and Economic Infrastructure Services*, Research Report, Canberra, p. 202.

[23] *Australian Government response to the Productivity Commission Annual Review of Regulatory Burdens on Business: Social and Economic Infrastructure Services*, from: http://www.finance.gov.au/publications/response-to-the-pc-annual-review-of-regulatory-burdens-on-business/index.html

[24] Ministerial Council on Energy meeting Communique, 11 June 2010.

[25] For instance, the New South Wales Independent Pricing and Regulatory Tribunal's draft pricing decision for 2010 to 2013 recommended prices increase by 44 to 62 per cent over 2009-10 to

networks and retail factors – will push up against the constraints of regulated retail prices creating challenges for both regulators and the industry.

Figure 2: The electricity supply chain

To turn natural energy resources into electricity involves a number of steps. The single price retail customers pay for a bundled electricity product reflects all these steps: conversion, transport through the transmission and distribution networks, and retail services.[26] While data on the underlying composition of retail prices are not widely available, an indicative breakdown for residential customers is:

- 40 per cent for wholesale electricity
- 47 per cent for networks
- 8 per cent for retail operating costs
- 5 per cent retail margin.[27]

Wholesale electricity costs

Global economic activity and resource competition will put pressure on fuels costs

The electricity generation sector faces the prospect of rising fuel costs from resurgent global economic growth increasing demand for Australian energy resources and the increasingly likelihood of a liquefied natural gas (LNG) industry on the east coast.[28]

Increased global demand for natural gas has seen the development of several LNG export projects in Western Australia and the proposed development of others in Queensland. The Western Australian experience suggests that with an east coast LNG industry, NEM gas prices will likely gravitate towards export parity.[29] With a greater reliance on gas-fired electricity generation in response to climate change policies, Australian electricity and natural gas prices could become increasingly exposed to movements in international energy prices through the pricing of LNG and exported black coal.

2012-13. Independent Pricing and Regulatory Tribunal 2009, *Review of Regulated Retail Tariffs and Charges for Electricity 2010-2013*, Electricity – draft report and draft determination.

[26] Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia, p. 206.

[27] Independent Pricing and Regulatory Tribunal 2007, *Regulated Electricity Tariffs and Charges for Customers 2007 to 2010* – Electricity Final Report and Final Determination, p. 2.

[28] A number of projects in Queensland are aiming for final investment decision in 2010. EnergyQuest 2009, *Australia's Natural Gas Markets: Connecting with the World*, Essay in Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia.

[29] For instance, see the 2009 ACIL Tasman report, *Fuel Resource, New Entry and Generation Costs in the NEM*, which assumes an east cost LNG industry and projects steadily increasing gas prices, particularly for Victoria and South Australia.

Tightening supply demand balance means new generation investment will be needed

The NEM is expected to enter an 'investment cycle' in the coming years. When the NEM commenced in 1998, it inherited from the previous state electricity commissions an oversupply of generation capacity, estimated at 19 per cent.[30] This initial over-capitalisation was exacerbated by a number of state government investments in generation that appear to have been premature on purely commercial grounds.[31] However, as the NEM enters its twelfth year, this surplus of supply has largely been absorbed by load growth and a tighter demand and supply situation looms.[32]

Continuing to meet load growth will require new investment which must be paid for in electricity and contract prices. Additionally, as the supply demand balance tightens, the incentive for generators to forward contract electricity diminishes as there is greater prospect of higher wholesale prices. This is likely to lead to higher contract prices with retailers and is another cost pressure pushing against regulated retail constraints.

Emission reduction policies are not costless

The investment task to accommodate load growth will be compounded by the impact of emission reduction and environmental policies on the sector. Even emission reduction targets to 2020 that are viewed by some commentators as being modest present as strong catalysts for significant restructuring of the industry and a fundamental change in the nature of electricity generation and delivery as well as the role of renewables and natural gas in the domestic energy supply mix.[33] An emissions reduction policy (be it the former Government's Carbon Pollution Reduction Scheme (CPRS) proposal or another mechanism) could increase costs through a number of avenues.

Firstly, if generators are required to hold permits to back their emissions from fuel combustion, such as through an emissions trading scheme, these carbon costs will become a new variable cost facing the industry.

Secondly, significant emission reductions are not possible without retiring existing emissions intensive plant.[34] To maintain a reliable electricity supply and transition

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[30] Simshauser, P. 2010, *Vertical Integration and Retail Price Setting in Energy-only Markets: Navigating the Resource Adequacy Problem*, Working Paper No. 16 – Regulated pricing.

[31] Simshauser, P. 2010, *Vertical Integration and Retail Price Setting in Energy-only Markets: Navigating the Resource Adequacy Problem*, Working Paper No. 16 – Regulated pricing.

[32] A tighter supply demand balance is probably being exacerbated by uncertainty over carbon pricing delaying investments.

[33] Modelling of the National Electricity Market by the Australian Energy Market Operator for the National Transmission Statement shows that the Renewable Energy Target will drive an unprecedented take up of renewables, mainly wind. Australian Energy Market Operator 2009, *National Transmission Statement: National Grid 2030 for a Low Carbon Australia*, p. 3-16.

[34] This result was found in esaa's *Energy and Emissions Study*, available from: http://www.esaa.com.au/images/stories//eestudy2introduction.pdf

away from emission intensive fuels and technologies will require investment in more expensive generation. Modelling by the Australian Energy Market Operator[35] shows an increased reliance on gas-fired generation, which is a more expensive technology than the current largely coal-based fleet.[36]

Networks

Network investment will increase considerably in coming years due to a range of pressures: enhanced licence and network requirements (including reliability standards); replacement of ageing infrastructure built following the Second World War; connecting remote renewable and embedded generation in response to climate change and technology policies; and meeting unabated growth in peak demand.

This rising cost trend was displayed in recent AER determinations for New South Wales and Australian Capital Territory distribution networks that approved over $14 billion of investment over the next five years.[37] This represents an 80 per cent increase in distribution network expenditure for New South Wales and 66 per cent for the Australian Capital Territory network. Similarly, the AER's recent transmission determinations for New South Wales and Tasmania provide for a significant increase in investment – 140 per cent higher than for the previous five years in real terms.[38]

Network cost pressures are also present in the Western Australian market. The Economic Regulation Authority recently approved a 45 per cent increase in the Maximum Reserve Capacity Price for the Wholesale Electricity Market's Reserve Capacity Mechanism for the 2010 reserve capacity cycle. The Independent Market Operator, which undertook the price review, cited a substantial increase in transmission connection costs as the prime driver of the cost increase.[39]

Costs from increased technological capabilities

Rising network costs from reliability and peak demand pressures will be compounded by the deployment of enhanced technologies. A high profile example is the cost of new metering under the national interval meter rollout that commenced in Victoria.[40] The rollout of smart network technologies will add to

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[35] See Australian Energy Market Operator 2009, *National Transmission Statement: National Grid 2030 for a Low Carbon Australia*.

[36] In addition, depending on how any policy applies to the non-electricity sector, carbon costs may increase the cost of materials used in generation and network equipment, such as iron, steel and aluminium.

[37] Investment figures from the *State of the Energy Market* speech to Energy 21C conference in Melbourne by Australian Energy Regulator member Ed Willet on 8 September 2009.

[38] Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia, p. 131.

[39] Independent Market Operator 2010, *Final Report: Maximum Reserve Capacity Price Review for the 2012-13 Reserve Capacity Year*.

[40] For example, St Vincent de Paul Society 2009, *Customer Protections and Smart Meters, Issues for Victoria*.

costs in the short term, although they are expected to reduce costs over the longer term.[41]

Retail

Renewable Energy Target

The large-scale RET, which mandates 41,000 GWh of renewable energy from large scale plants by 2020, is driving the mass deployment of more expensive technologies. The cost of the meeting the RET will manifest in the price of renewable energy certificates (REC), which are borne at the retail level. The large-scale RET may also drive increases in network costs as renewable fuel sources are often located far from the existing transmission backbone and will require extensive network extensions.[42]

At the other end of the market, the small-scale Renewable Energy Scheme (SRES) will provide households, small business and community groups $40 for each REC created by small-scale technologies like solar panels and solar water heaters. Once again, the cost of SRES certificates will be borne by retailers and recovered from consumers, adding to the cost of electricity supply.

Feed-in tariffs

Despite their negative social and economic impacts and environmental ineffectuality,[43] most states and Territories in Australia operate premium feed-in tariff schemes for small scale residential renewables.[44] Premium feed-in tariffs pay owners of small renewable installations a higher rate for electricity they provide back to the grid than the prevailing retail market rate. In some jurisdictions, payments are on a gross basis, which means installation owners also receive the premium rate for the electricity they generate for self consumption as well as for any energy fed in to the electricity grid.

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[41] For instance, a report by CSIRO explores the potential of demand management to provide substantial financial savings to consumers by reducing the need to build generation and network infrastructure to service peak demand for only a few hours of the year. See CSIRO 2009, *Intelligent Grid: A Value Proposition for Distributed Energy for Australia*, National Research Flagships: Energy Transformed.

[42] The Australian Energy Market Commission is considering connection of remote clusters of renewable generation in a Rule change proposal following its review of energy market frameworks in light of climate change policies. While the cost of network extensions is notionally borne by connecting generators under the National Electricity Rules, as renewables have mandated demand under the Renewable Energy Target, these costs will ultimately be borne by consumers in higher Renewable Energy Certificate prices.

[43] Tasmanian Department of Infrastructure, Energy and Resources 2008, *Feed in Tariff Discussion Paper*.

[44] Tasmania is the only jurisdiction without a premium feed-in tariff. In announcing its decision in its Energy Policy Statement not to pay a premium tariff to households that sell excess electricity back to the grid, the Tasmanian Government noted that “it is not fair or sensible to force other people to pay more than a fair and reasonable price for such electricity.”

While a feed-in tariff can reduce the cost of installing small scale renewable generation for households that access the schemes, in mandating premium rates for electricity generated, feed-in tariff schemes artificially add to the cost of meeting electricity needs on a system-wide basis and are an additional upwards pressure on the cost of providing Australia's electricity supply.[45]

Energy efficiency and other schemes

A range of energy efficiency and emissions abatement schemes also operate across jurisdictions, including the New South Wales Energy Efficiency Scheme and Greenhouse Gas Abatement Scheme, the Queensland Gas Scheme, the Victorian Energy Efficiency Target and the Residential Energy Efficiency Scheme of South Australia.

While targeting environmental and other outcomes, these schemes impose costs on electricity users that are borne at the retail level. For instance, the cost of the Queensland Gas Scheme for energy consumers is estimated at around $105 million.[46] On the other hand, where efficiency schemes facilitate a reduction in a household's electricity demand, that household may find itself with a lower total bill, even though unit costs are rising.

Direct costs of regulation

The myriad economic and policy factors described above are contributing to a rising cost structure for the electricity industry and must be accommodated somehow in price regulation. However, retail price regulation itself also adds costs to retailers that must be recovered through the supply chain. The direct costs have been estimated as easily exceeding $1 million per retailer per regulatory period.[47]

In addition to the compliance cost for retailers, which is borne within the electricity system, administering retail price regulation requires state and territory resources, which must be funded by tax payers. There are also second round effects from taxation including the deadweight loss associated with the tax-induced changes to decision making.[48]

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[45] For example, the Australian Energy Regulator in its final decision, *Australian Capital Territory Distribution Determination 2009-10 to 2013-14*, approved $47.9 million of costs estimated to be incurred by ActewAGL in relation to premium tariff payments between 1 July 2009 and 30 June 2014.

[46] Queensland Competition Authority, *Draft decision: Benchmark Retail Cost Index for electricity: 2010-11*, p. 21.

[47] CRA International, 2007, *The Effects of Retail Price Regulation in Australian Energy Markets*, Report to the Energy Supply Association of Australia, p. 63.

[48] CRA International, 2007, *The Effects of Retail Price Regulation in Australian Energy Markets*, Report to the Energy Supply Association of Australia, p. 61.

3. Why do governments regulate retail electricity prices?

Governments have a necessary role in electricity markets

Despite Australia's reform process to shift electricity supply to markets and commercial decision-making, compared to most goods and services (including several that are commonly considered essential), governments are still heavily involved in the supply of electricity in Australia. In part this reflects their continued ownership of key market participants, particularly outside of South Australia and Victoria, and national policies like renewable energy targets that determine the type of energy produced.

It also reflects that certain properties of electricity mean that for any central electricity market to emerge, central government involvement is necessary. These properties include that electricity cannot be cost effectively stored, the flow of power through a system cannot be directed and supply and demand must be matched in real time. These physical properties give rise to common benefits to all participants from: a well-designed market in which to trade electricity; robustly enforced rules and technical standards; and the common provision of ancillary services to maintain the system's operation.

While targeted government involvement in electricity markets may be appropriate for ensuring a secure electricity grid and a well-functioning market, one area where government intrusion is counterproductive is retail price controls. The key question is why governments continue to do it?

Rationales for regulation

No doubt governments are motivated by many reasons to regulate retail electricity prices, but foremost among them is their perception that voters consider electricity an essential service and therefore expect that governments will make sure it is affordable. This expectation is likely due to a lingering community attitude that electricity supply is a government responsibility that persists despite years of reforms devolving responsibility to markets.

The primary mechanism politicians use to ensure electricity is affordable is to regulate the price and so they either establish bureaucratic processes or retain electricity pricing as an executive power. Sometimes, governments even actively cultivate voter expectations for affordable electricity by raising expectations that price increases will be prevented, even where independent, objective and transparent regulatory processes are in place. The Tasmanian Government, during the recent election campaign, provided a recent example when it announced that if re-elected, a Labor government would intervene in retail electricity markets to limit power price rises to 5 per cent for 2010-11.[49] It subsequently backtracked on this announcement.

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[49] *The Mercury*, "Power Price Pledge Cap on Bills Cruel Hoax, say Libs," 16 February 2010. On 7 December 2009 Tasmanian Treasurer, the Honorable Michael Aird MP, wrote to Tasmanian Economic Regulator, Glen Appleyard, instructing him to limit tariff increases to 5 per cent under

Expectations for affordable electricity are generally reinforced by opposition parties looking to make political capital by decrying any cost of living increases on the government's watch[50] and promising to fix the alleged problem. They are abetted by consumer groups legitimately concerned about the effect of price rises on vulnerable consumers but who have no regard to the financial damage price control arrangements that apply to all retail customers, including the wealthy, inflict on the energy supply companies and the consequent long-term detriment to the efficient supply of electricity.

Is regulation in place to protect households from powerful energy companies and ineffective competition?

One possible underlying reason that governments continue to interfere in retail electricity pricing is that some governments have not fully embraced the philosophy guiding electricity reform over the last two decades – that markets, rather than government directives, are the best way to organise supply. Put simply, they do not accept that a service as important as electricity supply can be left to the decentralised, commercial decision-making of the market.[51]

A related motivation is scepticism that market competition is sufficient to protect consumers from being taken advantage of. Implicit in this attitude is the suspicion that energy businesses have excessive market power and that competition is not effective. This view was evident in submissions to the AEMC's review of South Australian competition.[52]

Or is it to protect households from effective competition?

A contrary interpretation to the view that governments do not trust competitive dynamics to keep prices to an appropriate level is that governments are unwilling to deregulate prices because they do not want cross subsidies to unwind when price caps are removed.[53]

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amended regulations for the 2010-11 pricing determination. However, the Regulator has noted that the regulations were not amended prior to the caretaker period for the Tasmanian Government, and hence the Regulator has resumed a normal price investigation. http://www.energyregulator.tas.gov.au/domino/otter.nsf/8f46477f11c891c7ca256c4b001b41f2/d7473aabf7072f8eca2575fd0016fb6d?OpenDocument

[50] Gay, D., Shadow Minister for Energy, "Keneally's Kris Kringle Gift to NSW Public: Drastic Rise in Electricity Prices," Media release of 15 December 2009.

[51] It is likely that this view of markets could harden following the Global Financial Crisis, despite attempts by leading Australian economists to draw the distinction between problems in particular markets and the value of markets in general. See for instance, *Markets: how free?* Speech to the Whitlam Institute Governing the Economy Symposium in Sydney by Gary Banks, Chairman of the Productivity Commission, on 30 November 2009.

[52] For instance, see Uniting Care Wesley 2008, *AEMC Review of the Effectiveness of Competition in Electricity and Gas Retail Markets in South Australia: Draft Second Report*.

[53] KPMG 2003, *The Effectiveness of Competition and Retail Energy Price Regulation*, Discussion paper prepared by KPMG for the Energy Retailer Association of Australia.

This is because under regulation, prices are often averaged across customer classes, with profitable customers cross-subsidising unprofitable ones. Deregulated prices, particularly with time of use pricing under smart meters, could see competitive dynamics encourage retailers to institute more efficient prices for different customer classes that unwind cross subsidies and present consumers with the true costs of their electricity supply.

Inevitably there would be winners and losers from more efficient pricing; a potentially politically difficult situation. Accordingly, governments may be tempted to retain price regulation to shield consumers from effective competition, not ineffective competition.

4. Price regulation and the electricity market

Retail price regulation has a number of negative impacts on the electricity market at different parts of the supply chains. These impacts will likely be complicated by the cost pressures described above and are both short term and dynamic – impacting the pattern of entry, exit and the ability of the industry to evolve in response to emerging challenges.

Electricity and competitive markets

Electricity supply is technologically complex, capital intensive[54] and characterised by long-term investments in the order of 30 to 50 years. Given its importance to the economy and the community, the best way to deliver a reliable and secure supply at least cost has been an enduring question facing policy makers.

Competition as a tool to deliver a least cost supply

As described above, the principles of economic reform pursued by successive federal and state governments over the last two decades has seen responsibility for electricity supply largely devolved to the decentralised and commercially-driven decisions of private and corporatized entities in competitive markets. This model of electricity supply is consistent with the operation of the broader Australian market economy and hinges on competition in the competitive parts of the industry (generation and retail sectors) to deliver a least cost supply of electricity to consumers.

Enabling competition in electricity supply means that the competitive dynamics of firms competing for market share are used to produce efficient retail prices. It should be stressed that efficient prices produced by competitive markets are not the same as ‘cheap’ prices per se. Rather an efficient price is a price that reflects the underlying costs of supply to meet prevailing demand.

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[54] In fact, the electricity industry is the world’s most capital intensive industry. Simshauser, P, 2009, *Australia’s Energy Challenge,* Presentation to Australian Investment Conference: http://www.agl.com.au/Downloads/AustraliasEnergyChallenge_ASXPresentation.pdf

In retail markets that are not contestable and hence do not have competition or the credible threat of competition, the retention of retail price controls may be justified on the grounds of protecting consumers from market power that could lead to higher than efficient prices.

However, in markets where contestability is enabled, prima facie, there is no market failure justifying the continued regulation of retail prices. This is particularly salient in Australia where electricity retail markets are among the most competitive in the world. In a 2008 ranking of consumer switching behaviour (an important dimension of energy market competitiveness) in over 50 competitive energy retail markets worldwide, Australia retained its position as the most active region in the world, with the Victorian market topping the global rankings.[55]

Competition makes sense as electricity is a naturally competitive industry in Australia

A number of characteristics make electricity in Australia, particularly in the NEM, an inherently competitive product. The primary input, electricity, is sourced from an intensely competitive wholesale market. In geographic span, the NEM is the largest interconnected power system in the world, covering a distance of 4,500 kilometres, and has around 270 registered generators.[56] The NEM is designed such that generators compete with each other every five minutes to sell their electricity.[57]

While the NEM's design requires occasional transitory market power for generators to be viable, the National Electricity Rules have strict guidelines and penalties to control bidding behaviour, which the AER monitors and enforces. The AER also tightly regulates prices for electricity transport – both transmission and distribution networks. This means that retailers have no scope to affect network prices.

The other cost driver for competition over prices is the operating costs and margins of retailing.[58] However, there are low barriers for new retailers to enter or exit the market, as entry does not entail significant sunk costs or exclusive technology.[59] This means that new entrant retailers could enter and supply electricity if incumbents were earning higher than competitive profits and

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[55] Vaasa ett 2008, *Utility Customer Switching Research Project, World Energy Retail Market Ranking*, Fourth Edition.

[56] Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia, p. 72.

[57] The South West Interconnected System of Western Australia has a different market model, but retains competitive dynamics, particularly through its Short Term Energy Market.

[58] Under the National Electricity Market's gross pool model, all retailers must buy their electricity from the same pool. However, retailers can enter into individual electricity hedge contracts with National Electricity Market counterparties – mainly generators – to attain greater price certainty. This is another area where retailers can potential gain a competitive advantage over their competitors.

[59] CRA International, 2007, *The Effects of Retail Price Regulation in Australian Energy Markets*, Report to the Energy Supply Association of Australia, p. 53.

'squeeze' those profits out. With full retail contestability introduced in Victoria, New South Wales, South Australia, Queensland and the ACT, the supply of electricity to most customers in Australia is amenable to competition.

Finally, electricity is a perfectly homogeneous product – one unit of electricity is indistinguishable from another, which means retailers have no scope for competitive advantage from a 'better' kind of electricity.[60]

However, price regulation is a barrier to entry that undermines competition

Where price regulation is employed, it can be a barrier to entry and an inhibitor of competition.[61] In cases where prices are held below cost, such as New South Wales[62], Western Australia and the Northern Territory (see figure 3), this is a strong commercial disincentive to enter the retail sector.

Diminished competition can lead to a loss of innovation and customer service, and prevents retailers competing for market share and being responsive to the needs of their current and prospective customers.[63] Price regulation can also stifle price offers as the regulated price can act as a focal point for price coordination for suppliers, with prices set in reference to the regulated standard tariff.[64]

Figure 3: The Northern Territory

In March 2009 a review of the financial position of Power and Water Corporation, the government-owned integrated supply utility, found electricity tariffs for regulated customers would need to increase by 55 per cent for it to reach 'financial sustainability' and even more to reflect full economic costs.[65] In response, the Government announced increases in regulated electricity tariffs well below its advice: 18 per cent in 2009-10, 5 per cent in 2010-11 and CPI for the following two years.

Even in cases where regulated prices allow cost recovery on average, price regulation may discourage new entry as it exposes commercial operations to regulatory risk, given that regulated prices will be reset at the end of the regulatory period. In Queensland, South Australia, and Tasmania , the period between regulatory resets is only 12 months. This does not allow retailers to

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[60] Retailers do offer 'green' electricity products, but that relates to how the electricity was generated, not the nature of the electricity itself.

[61] OECD 2010, *OECD Reviews of Regulatory Reform: Competition policy in Australia*, OECD, p. 59.

[62] Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia, p. 207.

[63] CRA International, 2007, *The Effects of Retail Price Regulation in Australian Energy Markets*, Report to the Energy Supply Association of Australia, p. 66

[64] Australian Energy Market Commission 2008, *Review of the Effectiveness of Competition in Retail Electricity and Gas Markets in Victoria, Second Final Report*, p.6.

[65] Utilities Commission 2009, *Review of Full Retail Contestability for Northern Territory Electricity Customers Issues Paper*, August.

develop longer term plans or contracts and will likely add to costs through customer churn.

The integrity of the price setting process can also be a concern for existing and prospective retailers. While the Western Australian and the Northern Territory governments determine prices, the other states take advice from economic regulatory agencies that undertake independent price determination processes. However, the tribulations in Queensland over the last few years highlight an additional concern with price regulation: the risk that governments will interfere with independent price setting processes (see figure 4).

Figure 4: Queensland

On 23 October 2009 the Queensland Competition Authority (QCA) commenced the regulatory process to determine retail tariffs for 2010-11. On 18 December 2009 the Authority released its draft decision of a 13.83 per cent increase in the Benchmark Retail Cost Index (BRCI) that is used to adjust retail tariffs. Later that afternoon, Mines and Energy Minister, the Honourable Stephen Robertson, publicly questioned the QCA's findings and directed the Treasury to analyse the QCA's methodology.[66] On 12 February 2010 the Government lodged a submission with the QCA challenging aspects of its draft decision.[67]

The Queensland Government does not have a good reputation on price decisions. On 14 August 2008 and 1 September 2008, AGL Energy and Origin Energy respectively instituted proceedings in the Supreme Court against the QCA and the Minister for Mines and Energy, challenging the Authority's 2008-09 BRCI decision. On 28 April 2009 the Court found against the Government and ordered that the Authority remake its decision of the increase in the BRCI from 2007-08 to 2008-09. The remade decision saw an increase from 5.38 per cent to a 9.06 per cent increase in regulated tariffs.[68]

Price regulation because competition is insufficient can become self perpetuating

Consumers benefit from competition in the retail sector. As more new players emerge, or there are credible threats of new entry, the pressure to attract and retain customers intensifies. This provides incentives for retailers to improve service, develop products that meet consumer demands and find ways to lower their costs and to pass those costs on to consumers. Competition in retail electricity, as in other sectors of the Australian economy, encourages prices to be efficient – that is, as low as is sustainably possible while businesses still make an appropriate return.

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[66] The Honorable Stephen Robertson, "Government to Review QCA's 2010-11 Electricity Price Decision," Press release of 18 December 2009.

[67] Queensland Government 2009, *Submission to the Queensland Competition Authority, Response to the Draft Decision on the Benchmark Retail Cost Index for Electricity for 2010-11.*

[68] Figure from http://www.qca.org.au/electricity-retail/NEP0809/RemadeDecision.php.

However, if jurisdictions continue to regulate prices on the grounds that sufficient competition has yet to emerge, the barrier to entry that is regulation can entrench the lack of competition. One indication of how price regulation, particularly below cost regulation, can impact the extent of competition across Australia's jurisdictions is the penetration of so-called 'second tier' retailers.[69] At April 2009, Victoria, which was found to have had effective competition in the electricity market by the AEMC before the formal deregulation of prices, had 14 licensed retailers active in the residential and small business market, of which nine were second tier retailers.[70] At the same time New South Wales, which has regulated prices below cost, had nine licensed retailers active in the residential and small business market, of which only two were second tier retailers, and one of which has since departed the market.[71]

Regulation and price signals

A flexible electricity price is essential for an efficient electricity market – that is, a market that satisfies the wants of consumers at lowest sustainable cost. Flexible prices transmit information about the demand and supply situation through the supply chain. The price sends signals to consumers to change their consumption patterns in response to the generation and network supply situation and signals to producers about the need to invest in new capacity. Retail electricity prices also send signals to related markets, such as electricity contract markets, which are integral to stimulating new investment, and potentially future carbon markets.

Distorting price signals leads to inefficient use of resources

By suppressing price adjustments in response to the supply demand situation, retail price regulation inhibits these signals. This can lead to allocative inefficiency, where the cost of resources used to produce electricity is greater than the benefit derived by consumers. Such an outcome is an inefficient use of Australia's economic resources.

This inefficiency can be particularly acute in jurisdictions where regulated prices are not cost reflective, such as in Western Australia or in Queensland, where the Queensland Competition Authority noted in its review of the Benchmark Retail Cost Index that "if any individual tariff is currently cost reflective for certain

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[69] Second tier retailers are those that do not have significant generation or interests in distribution and are not first tier retailers in other states or subsidiaries of first tier retailer. Financial Markets Working Group 2009, *Survey of Second Tier Retailers*, p. 32. http://www.ret.gov.au/Documents/mce/_documents/2009%20Bulletins/Survey%20of%20Second%20Tier%20Retailers%20Report%20(June%202009).pdf

[70] Simply Energy, Click Energy, Jackgreen (who has since departed the market), Neighborhood Energy, Powerdirect, Red Energy, Victoria Electricity, Momentum Energy and Australian Power & Gas. Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia, p. 196.

[71] Jackgreen (since departed the market) and Powerdirect. Australian Energy Regulator 2009, *State of the Energy Market 2009*, Commonwealth of Australia, p. 195.

customers, then that outcome is most likely due more to coincidence than deliberate design."[72]

Price signals are needed for new technology to be effective

Price signals are essential if consumers are to participate in the electricity market. In April 2007 the Council of Australian Governments committed to a national mandated roll-out of electricity smart meters to areas where benefits outweigh costs. Interval meters offer the potential to increase retail pricing efficiency (by charges that better reflect costs), provide better incentives for demand side participation in the NEM, increased network efficiency, reduced meter reading costs, greater equity among electricity consumers and increased NEM settlement accuracy.[73]

While some of these benefits are unaffected by retail price regulation, such as reduced meter reading costs, benefits such as that flowing from increased retail pricing efficiency might be stunted by the continuation of retail price regulation. The transitional issues from the overlap between smart meters and price regulation was noted in a report to the Ministerial Council on Energy's Smart Meter Working Group, which stated that transitional regulatory issues that would need to be resolved as part of a decision on whether to undertake a mandatory rollout of smart metering include the interaction of new tariff structures within existing retailer regulatory arrangements, given that some jurisdictions mandated flat rate (and hence non cost-reflective) pricing.[74]

Flexible price signals are the key to efficient emissions abatement

While climate change policies will herald a period of uncertainty for the electricity industry, they do not justify continuing the comforting surety of regulated retail prices, despite how appealing it might be. Rather, the introduction of climate change policies, whether the CPRS or other mechanisms, reaffirms the case for deregulation of electricity prices to provide consumers and businesses the flexibility to efficiently reduce emissions.

The transmission through the supply chain of carbon prices levied on the upstream electricity sector will be integral to the Australian economy achieving emission reduction objectives at least-cost. If consumers do not face the full cost of energy use including the cost of the impact of emissions, then they will not respond to the price signals and climate change policy objectives will be undermined.

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[72] Queensland Competition Authority 2009, *Draft report: Review of Electricity Pricing and Tariff Structures – Stage 1,* August, p. 12.

[73] User Participation Working Group 2005, *Common Principles for the Assessment of Interval Meters: Overview Paper*, Report to the Ministerial Council on Energy Standing Committee of Officials, June, p. 2.

[74] NERA Economic Consulting 2008, *Cost Benefit Analysis of Smart Metering and Direct Load Control, Overview Report for Consultation*, Report for the Ministerial Council on Energy Smart Meter Working Group, p. 206.

In contrast, exposing electricity consumers to the cost of carbon will encourage them to seek ways to reduce their electricity consumption and lead to abatement. This issue was recognised by COAG in its amendment to the AEMA for the pass-through of carbon costs under the CPRS and the expanded Renewable Energy Target into retail prices where those prices are regulated.[75]

The responsiveness and accuracy of regulated prices

Price regulation cannot keep up with changes in costs

An inherent feature of price regulation is that administrative approval is required to adjust prices, even if assumptions used in the price setting process become out of date. However, underlying electricity market conditions can change rapidly, such as in 2007 in the NEM when the drought constrained water availability for hydro and coal generators[76] or in 2008 in Western Australia when the Varanus Island gas processing plant explosion affected gas availability and forced up wholesale prices.[77] The responsiveness of bureaucratic regulation in such circumstances may be insufficient to prevent financial distress on the industry.

The responsiveness of price regulation is pertinent with the introduction of climate change policies. Since the AEMA amendment, reviews of approaches to regulation have examined ways to practically implement carbon pass-through.[78] While pass-through is preferable to forcing retailers to absorb costs, a pass-through mechanism in administered prices is nonetheless inferior to allowing the market to set prices given the scope for rapid changes in underlying market conditions.

For instance, as carbon pricing reduces the profitability and economic lives of coal-fired generators, this may lead to rational business decisions to do less maintenance as plants approach the end of their lives.[79] This increases risks of unexpected generator failures, which could have negative impact for counterparties to hedge arrangements and destabilising impacts on the broader market. Alternatively, significant wholesale electricity price volatility, which is likely at least in the early stages before any future carbon market matures[80], could cause challenges for retailers constrained by administered price controls.

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[75] See *Notice of Amendment to the Australian Energy Market Agreement*, 2 July 2009.

[76] Speech to APP Energy Regulator and Market Development Forum by Ed Willet, Member of the Australian Economic Regulator, on 27 June 2008, p. 8.

[77] Economic Regulation Authority 2009, *Annual Wholesale Electricity Market Report to the Minister for Energy: Discussion Paper.*

[78] For instance, see current reviews by the Independent Pricing and Regulatory Tribunal, the Queensland Competition Authority and the Essential Services Commission of South Australia that include discussion of passing through carbon costs.

[79] *ABC News*, "Emissions scheme may bring power cuts: TRUEnergy", accessed from: http://www.abc.net.au/news/stories/2009/07/12/2623385.htm

[80] See Farrier Swier Consulting 2009, *Managing CPRS Transition: Implications for Electricity Retail Price Regulation*, Report for the Energy Retailers Association of Australia.

While in the Western Australia context institutional arrangements between State-owned companies transferred costs from the unexpected incidents at the gas-processing plants back to taxpayers, where this is not possible and where the retail sector is privately owned (as it will soon be in almost all of the NEM following privatisation in New South Wales), costs that cannot be recovered in a timely manner must be borne by industry, either in the margins of retailers or by generators through discounted contract prices.[81] This can cause financial distress for industry and in severe cases, commercial failure. This in turn raises the industry's cost of capital, a legacy of political interference that could persist for some time.

The risk of regulatory error

Another unavoidable feature of price regulation is the risk of error by jurisdictional regulators. These risks will be exacerbated by the introduction of climate change policies as there will be no history of the electricity market under carbon pricing or large scale carbon reduction polices on the electricity sector from which to project future trends, and arguably unprecedented volatility. The difficulties price setting regulators will face is evident in the litany of uncertainties and volatilities in wholesale electricity prices.[82]

A large new driver of uncertainty is carbon price uncertainty, which in part will reflect domestic and international policy uncertainty. Carbon prices will also feed into changed merit orders, as coal and gas fired generators will need to factor in the cost of emission permits (or the value of free permits) into their bidding in the spot electricity market, the determination of target generation volumes and the pricing of hedge contracts. As the emissions intensity of different generation technologies varies, this is expected to cause changes in the merit order for generation.

Emission reduction policies such as the CPRS or direct action plans are expected to trigger plant retirement for high emission coal generators as carbon prices rise. To date there has been little experience in the NEM with significant plant retirements, and therefore there is limited information to assess the impacts on electricity prices.

Impacts of price regulation on generation

While the impact of price regulation on the retail sector is more apparent, it can also have effects upstream on the generation sector. As an energy-only market, generation assets in the NEM primarily rely on payments for electricity generated

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[81] Generally speaking the network sector does not bear the cost shortfall as their revenues are regulated by the Australian Energy Regulator and are set on an expectation of being cost-reflective.

[82] This discussion draws from Farrier Swier Consulting, 2009, *Managing CPRS Transition: Implications for Electricity Retail Price Regulation*, Report for the Energy Retailers Association of Australia.

to recover variable and fixed costs of generation.[83] It is wholesale price volatility, and particularly periodic price spikes, that should drive average wholesale prices and electricity contracts to levels sufficient to recover total costs. However, retailers paying generators sufficient revenues hinges on retailers being able to recover costs from consumers. To the extent that price regulation prevents this, distortions can emerge in the wholesale market.

Contracting

One area where distortions can manifest is in the electricity contract market. While the NEM mandates that all electricity is traded centrally through a gross electricity pool, the derivative electricity contracting market is an integral part of electricity supply in Australia. Electricity market participants trade a range of derivative electricity hedge contracts, either bilaterally or through exchanges.

For retailers, electricity contracts with generators provide cost certainty and avoid exposure to the volatility of the spot market, where prices can rise to more than one hundred times the average price in any five minute period. For generators, electricity contracts with retailers provide the advantages of cash flow and revenue certainty and are essential in obtaining finance for new investment.[84]

Retail price regulation risks interfering with contracting incentives. For a retailer, the difference between the regulated tariff and the cost of network usage (which is beyond its control) and the operating costs of retailing electricity determines the amount available for purchasing wholesale electricity. To the extent that this amount is below the competitive price that a generator requires given costs at the wholesale level, this introduces a market distortion. A generator in this situation can then either accept an underpriced contract, which will reduce its margins, or decide not to contract but rather sell its output directly on the spot market. If generators take the second option and sell into the pool, they are incentivised to increase the volatility in the spot market to maximise their returns.[85]

From the retailer's perspective, if they have been unable to fully hedge their customers' load because retail price caps did not allow a sufficient margin, they will be exposed to the spot market for their electricity purchases. With the market price cap set at $12,500 per MWh, the volatility of the spot market and the magnitude of price spikes can be expected to increase over time. If retailers are exposed to a particularly volatile period, there is greater risk of financial distress

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[83] An energy-only market is where generators are only paid for electricity they produce. They receive no payment for the capacity that they make available to produce, although certain hedge contracts essentially provide payments for capacity, such as the premiums paid on 'cap' options to peak generators. In contrast, Western Australia's Wholesale Electricity Market has a capacity market whereby generators receive payments simply for being available to generate through the Reserve Capacity Mechanism.

[84] Another commercial strategy to manage wholesale price risk for retailers in the National Electricity Market is vertical integration where retailers own generation capacity.

[85] In contrast, greater forward contracting by generators should lower spot price volatility as generators have the incentive to bid stably at short run marginal cost to maximise their chance of being dispatched.

or in the most severe cases, failure. To the extent that happens, competition in the retail market is lessened.

Interfering with incentives to invest

In addition to impacting on contracting incentives, retail price limits may also have adverse impacts on incentives to invest in generation if regulation does not allow the full costs of generation to be recovered from customers. This effect could be particularly pronounced for investment in peaking generation that is used for only a few hours each year to meet rare periods of very high demand.

The risk of inconsistency between regulated retail prices and other administered prices in the wholesale market may also affect investment incentives. The NEM is not a pure energy-only market as a number of constraints and intervention mechanisms have been overlaid. In particular, the market price cap limits the magnitude of price spikes (currently set at $12,500 per MWh).[86] The market price cap is set at a level to encourage sufficient investment to meet the NEM reliability standard (currently 0.002 per cent unserved energy) and is designed to operate in part by determining the maximum wholesale price exposure of retailers, which drives the price of products to hedge that exposure.

However, with retail price controls, there is a risk that the reliability price envelope and regulated retail price limits could become out of step with each other, which could see the NEM framework to achieve reliability at the wholesale level undermined by price regulation at the retail level.

5. Consumers and price deregulation

The electricity sector is a cornerstone of Australia's way of life. A safe, secure, reliable and quality supply of electricity brings considerable amenity to the community, evidenced by the rapid growth in residential air conditioner use and the ever increasing installation of information technology and entertainment appliances.

Consumer access to energy

Delivering a safe, secure, reliable and quality supply of electricity to Australian households and business entails costs. As described above, these costs are likely to increase in the future from unavoidable and policy-induced pressures.

[86] The market price cap is scheduled to increase to $12,500 from 1 July 2010 and the Australian Energy Market Commission Reliability Panel is currently considering an increase to $16,000 from 1 July 2012. See the *Reliability Standard and Settings Review Draft Report*, available at: http://www.aemc.gov.au/Market-Reviews/Open/Review-of-the-Reliability-Standard-and-Settings.html

Price regulation can not make costs 'disappear'

The first observation to make is that these costs will have to be met somewhere in the economy. This is a reality that cannot be escaped. Where price regulation prevents costs from being recovered from consumers, costs do not 'disappear.' Rather, costs quarantined from the customer by governments are reallocated to be borne elsewhere in the economic system, either contemporaneously or in the future. Policies that ignore this reality merely mislead the community.

Western Australia is a good example of this, where tariffs were held well below cost-reflective levels by governments unwilling to raise tariffs, despite rising costs, for up to 18 years.

To deal with the shortfall between tariffs and costs when the former state monopoly, the Western Power Corporation was disaggregated, a vesting contract with netback provisions between the state-owned generator, Verve Energy, and retailer, Synergy, was created. This saw the shortfall between costs and regulated prices pushed back onto the Verve Energy and ultimately borne by the Western Australian taxpayer, including through a special State subsidy.

As noted in the Verve Energy Review released in 2009, the lack of cost-reflective tariffs contributed to Verve Energy losing around $450 million over 2006-07 to 2008-09.[87] Western Australia has belatedly commenced tariff rises to instate financial integrity to its electricity industry (see figure 5).

[87] Oates, P. 2009, *Verve Energy Review*, August.

Figure 5: Western Australia

In 2009 the Western Australian Office of Energy reported that electricity retail tariffs were far from cost reflective.[88] This was because residential tariffs had not increased since 1997-98 and small business tariffs had not increased since 1991-92 – an 18 year nominal price freeze. As costs had risen significantly over that period, the Office of Energy recommended that residential tariffs increase 52 per cent in 2009-10 and 26 per cent in 2010-11 and that small business tariffs rise by 29 per cent and 26 per cent over the same period.

The Western Australian Government baulked at the recommendations; although the final 2009-10 approved tariff increases of 27 per cent for residential customers and 16 per cent for small businesses were nonetheless significant.[89] Energy Minister Collier has since been reported publicly as being resolved to continue the transition to cost reflectivity, saying that the state had to "get to a point where the cost of producing electricity is met by consumers."[90] The Government has since released its price decision for 2010: a 7.5 per cent rise for residential customers on 1 April 2010 followed by a 10 per cent rise on 1 July 2010.[91]

Who should bear the costs of electricity supply?

As costs of electricity supply have to be met somewhere, the question is how should they be distributed throughout the Australian community?

From the perspective of the efficiency of the electricity market – that is, the market's ability to produce at least cost a service that people value – costs should be borne by those who are consuming electricity. This will encourage them to respond to signals from the market and enable them to provide signals through their consumption decisions to the supply side of the market on what type of services they desire.

Approaching the question of the distribution of cost burden from an equity perspective yields the same conclusion: It is fair and sensible that the cost of electricity supply is met by those who benefit from it.

Price deregulation and its discontents

The most direct way to allocate the cost of electricity supply to those who benefit from it is to allow prices to reflect costs. The most effective way to do this is to allow retail electricity prices to be determined by the market.

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[88] Office of Energy 2009, *Electricity Retail Market Review: Final Recommendations Report – Review of Electricity Tariff Arrangements*, Office of Energy Report to the Minister for Energy, January.

[89] Collier, P. "State Government announces increases in tariff arrangements", Press release of 22 February 2009.

[90] *Sunday Times Perth*, "Power Shock for WA", 1 November 2009.

[91] Barnett, C. and Collier, P. "State Government announces increases in tariff arrangements", Ministerial Media Statement of 8 March 2010.

However, a deregulated retail electricity market would lead to price increases in some instances, particularly where jurisdictions have held prices below costs.[92] As discussed, electricity prices are likely to continue rising over time due to numerous cost pressures.

Depending on their circumstances, some consumers may find cost increases unmanageable, either from the transition to cost reflectivity or future price rises. Welfare and community sector organisations consistently identify concerns about the ability of consumers, particularly low income and pension households, to manage rising electricity costs.[93]

How to ensure that households that cannot afford electricity at market prices have access to electricity?

One way that governments try to prevent electricity prices being unaffordable for the least well-off members of society is to interfere in prices for all households. One rationale sometimes advanced for this approach is that electricity is an essential service.

While the essential services argument has a superficial appeal, it is worth noting how little, if at all, governments are involved in the setting of prices for other essential goods and services such as food, clothing, housing, petrol, telecommunications and finance. For these products, the approach in Australia is market provision, with competition, appropriately supported by a national competition framework, relied upon to deliver appropriate prices.[94]

And while electricity is no doubt important, it is also surprising how small a share of the average household's expenses electricity is. According to the Australian Bureau of Statistics, expenditure on electricity is around 1.9 per cent of the average household's weekly expenditure.[95] This compares to housing at 16.1 per cent, food at 17.1 per cent and alcoholic beverages at 2.6 per cent.[96]

Taken together, these facts make the notion that governments should set retail electricity prices an oddity in Australia's market economy.

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[92] Australian Energy Regulator 2008, *State of the Energy Market 2008*, Commonwealth of Australia, p. 187.

[93] For instance, see the Queensland Council of Social Services submission to the Queensland Competition Authority's draft Benchmark Retail Cost Index decision for 2010-11.

[94] Governments continue to set prices for some essential services, such as public train fares. However, trains use natural monopoly infrastructure and hence price setting is appropriate. Centralised price/revenue setting for monopoly electricity networks is undertaken by the Australian Energy Regulator for equivalent reasons.

[95] Australian Bureau of Statistics, Cat. No. 6535.0.55.001, Household Expenditure Survey, Australia: Detailed Expenditure Items, 2003-04, table 2.

[96] Australian Bureau of Statistics, Cat. No. 6530.0, Household Expenditure Survey, Australia: Summary of Results, 2003–04, table 3.

Nonetheless, becoming involved in retail electricity prices to achieve social objectives is commonplace. Queensland Energy Minister, Stephen Robertson, prefaced his government's contribution to the Queensland Competition Authority's 2010-11 price setting processes by noting that, "The QCA draft determination gives a significantly higher price rise than Government and members of the public would consider reasonable," and that he is concerned about "the impact this will have on low-income earners and pensioners."[97]

While such concerns are naturally appropriate for governments, pursuing such social policy objectives through setting retail prices is an indiscriminate and inequitable approach. By suppressing retail tariffs governments certainly support the proportion of the community requiring additional assistance. However, as a broad brush mechanism, blanket price regulation means that better-off members of the community for whom market energy prices are affordable, albeit unwelcome, also benefit.

Such a tactic is, however, inequitable as the cost of providing concessional electricity is often borne by industry and shareholders (which as noted above in the case of Western Australia, may in fact be taxpayers). While a populist attitude might say this is justified as 'they can afford it', pushing the cost of social objectives onto a small component of the community – the energy industry – is inappropriate and entirely inconsistent with the approach to social welfare in Australia. Under state and federal programs, support for the less well-off in the community, such as unemployment benefits, pensions, public housing and disabilities support, is borne by the whole community via budget funded measures.

If not price regulation, what?

Clearly access to energy is an important social objective and excluding low income customers from the electricity market is inconsistent with social policy in Australia and the expectations of the community. The electricity industry does not advocate that low income consumers who cannot afford market price electricity should be denied supply.

Indeed, penalising low income households is inconsistent with the role of the electricity industry as corporate citizens of Australia. Energy companies have hardship programs to assist consumers having difficulty meeting their bills and to avoid disconnection and are working in conjunction with government and regulators to develop a national policy framework for the retail industry through the National Energy Customer Framework.

An efficient and transparent way to assist the more vulnerable members of the community to access energy is through purposely-designed, budget-funded measures such as Community Service Obligations. Assistance is most efficiently

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[97] The Honorable Stephen Robertson, "Government to Review QCA's 2010-11 Electricity Price Decision," Press release of 18 December 2009.

targeted through means-testing, which entails knowledge of factors such as household incomes and family size – data that is available to governments but not relevant to energy companies.

A range of consumer assistance measures for energy bills currently exists in Australian jurisdictions; for instance, the $120 annual energy concession in South Australia. To the extent that these are considered insufficient to meet the community's objectives following price deregulation, such programs should be increased at the discretion of governments. For instance, one possible area of concern in a price deregulated market could be the ability of low income households to manage changes in retail prices, particularly under time of use pricing. However, in the first instance it would be expected that retailers would offer consumers fixed price supply agreements to mitigate this risk. To the extent it was considered necessary, governments could develop additional carefully targeted support mechanisms to protect certain consumers from price volatility.

Pursuing this approach in the electricity market maintains the protection of customers and the price of electricity as two separate issues and would be consistent with government support in other areas of essential service. For instance, governments do not set the price of food but provide budget-funded income support for those who would otherwise struggle to meet their basic food (and other) needs in the private market.

Additional consumer benefits from electricity price deregulation

While indubitably some consumers will be made worse off in the short term following price deregulation, particularly where prices have been held well below cost for many years, there are offsetting benefits for consumers, including low income consumers, from a market-based price setting regime.

Price deregulation and unwinding cross subsidies

Current price regulation typically averages prices across households. This leads to cross subsidies between consumer classes and inevitably, some consumers benefit and others are disadvantaged depending on the time profile of their energy consumption or network usage and the required network augmentation to meet their electricity consumption needs. In particular, consumers that use electricity at peak times (such as by turning on air conditioners on especially hot days) drive up the cost of electricity supply for all users as they necessitate network build to meet occasional spikes in demand and more expensive generation to be called upon.

To the extent that price deregulation facilitates more cost-reflective charging for network and energy usage, more flexible prices raises the prospect of unwinding cross subsidies. As described in section three, this would produce winners and losers. Importantly, more cost-reflective pricing will require more advanced metrology equipment, such as interval meters that record when electricity is used and not just how much is consumed in total over a period as the current predominant accumulation meters do.

While it might be thought that low income consumers would naturally be losers from more refined pricing, this is not necessarily the case. For example, estimates of the cross subsidies between those domestic customers that do not have air conditioning and those that do range from $70 and $200 per customer per annum.[98] Given that lower income households are more likely to be without air conditioning, the current averaging of prices under price regulation does not reflect the additional costs of supplying air-conditioned households. The prospect of unwinding such cross subsidies through price deregulation would, in this instance, remove a socially regressive arrangement as well as be efficient.

Conversely, low income households could be negatively affected by more cost-reflective pricing. For instance, some consumers may have little scope to benefit from lower off peak prices under time of use pricing as their life circumstances mean they use most energy during the peak times.[99] To the extent that happens, this suggests that government support through target, budget-funded measures could be increased.

Reduced network and generation costs over time

With more flexible, deregulated retail prices there is scope to encourage demand side responses and potentially flatten load profiles by shifting demand to off peak times. This could attenuate growth in peak demand and reduce the need for network and generation investment, lowering the costs of supply in the future. Rising network costs are already adding significantly to consumer costs, as shown in the decision in the current New South Wales price determination, which found network costs could add up to $180 a year to the typical annual household bill in 2012-13.[100] This effect could be particularly effective with time of use metering to deliver more precise signals about when electricity is most expensive to supply.[101]

6. The way forward

Unfinished business

For more than two decades federal and state governments and industry have worked to achieve a comprehensive transformation of the electricity supply industry.

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[98] KPMG 2008, *Cost Benefit Analysis of Smart Metering and Direct Load Control, Workstream 3: Retailer Impacts – Phase 2 Consultation Report*, Ministerial Council on Energy.

[99] McGann, M., and Moss, J. 2010, *Smart Meters, Smart Justice? Energy, Poverty and the Smart Meter Rollout*, Social Justice Initiative.

[100] Independent Pricing and Regulatory Tribunal 2010, *Review of Regulated Retail Tariffs and Charges for Electricity 2010-2013*, Electricity – final report.

[101] CRA International 2008, *Cost benefit analysis of smart metering and direct load control*, *Stream 2: Network benefits and recurrent costs, Phase 2 – Consultation Report*, p. 72.

Australia's electricity market reform effort has been lauded internationally as creating one of the most transparent and competitive electricity markets in the world and a model for other countries.[102]

However, with the electricity industry facing a rising cost structure and an unprecedented transformation from climate change policies looming, such accolades are not a license for complacency. Retail price deregulation remains the last significant area of reform that must be addressed.

So what should be done?

Having come this far down the path of electricity market liberalisation, governments are faced with a choice. They can either embrace the power of markets to deliver Australia's electricity supply and remove price controls. Or they can reject the lessons of the Australian reform effort since the 1980s and continue to intervene in commercial and competitive decision making to the long-term detriment of consumers.

The experience with price deregulation in Victoria shows that the transition to price deregulation can be smoothly managed. The steps required are not radical and different jurisdictions have already made varying degrees of progress.

Governments can continue to support markets by monitoring the state of competition, as Victoria does. Further, they will have an important role to play to ensure that where certain consumers require assistance, it is provided through targeted, budget-funded measures.

[102] International Energy Agency 2005, *Energy Policy of IEA Countries – Australia*, OECD/IEA, p. 14.