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# Regulation of Privatised Public Utilities: Interests and Ethics

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Before the rise of neo-conservative economics, much of the water, electricity, gas, telephone and public transport infrastructure around the world was built by states in the name of nation building. Governments owned and operated the utilities to build their economies and improve the quality of life for all classes of people. Governments decided how they managed the infrastructure, charged for its use, and employed the people to build and maintain the networks. The policies they implemented were in the public domain. The extent to which utilities were efficient, effective and in the public interest was a public matter, and governments were accountable to the electorate for their successes or failures.

In recent decades a wave of privatisation has swept across the developed world and washed many of these utilities into the hands of international corporations. Theoretical assumptions about efficiency, market discipline and competitive pricing have driven the reform agenda but with the benefit of hindsight, evidence now suggests that in a number of cases, deregulation has failed to live up to expectations (Batstone 2000, Kraus 2005).

Publicly elected governments can no longer determine the management and pricing of privatised utilities by dint of their direct ownership. Where this control still exists it does so in the form of regulation. Regulations governing provision of utilities usually exist outside the battery of competition and anti-trust laws found in developed countries, and applies specifically to the industries concerned. Regulation of the energy sector can govern the structural aspects of the market such as geographic coverage, entry or exit of operators, licences, or limitations on vertical integration between generation and retail. Regulation can also govern operations such as price controls, disconnections and minimum service standards (Kraus 2005).

Now that private ownership of public utilities is an accepted norm, the contest between a laissez-faire approach and state control has narrowed to the field of regulation. Despite a low level of popular engagement with the setting of these regulations, the regulatory framework governing utility provision can have far reaching consequences for the economy, the environment, social equity and quality of life. The regulatory process involves many vested interests and conflicting points of view. With deep pockets and international scope, many utility owners are well placed to influence the

regulatory decisions of government, particularly where the interests of a number of owners coincide. Sometimes regulations can tie the hands of the larger incumbent operators in order to level the playing field for smaller companies and new entrants. Thus preferences for regulatory reform can differ within the private sector. Consumers, too can voice their interests, particularly through advocacy groups and the community sector. The consumer's voice is not unanimous though as different priorities will emerge with different lifestyles, values, geographic locations and economic conditions. A complex web of vested interests emerges in the regulatory process and it is up to governments to decide where the public interest lies.

There is a school of thought that contends that the presence of effective competition is a sufficient reason for deregulation. It argues that competitive discipline will be enough to protect the public interest, and that the inefficiencies and distortions caused by regulations reduce the performance of market operators for their customers, investors and the economy as a whole. We might call this position the 'competitive discipline view'.

There is another view that regulatory structures can be appropriate mechanisms for protecting the public good in a range of different ways. This view argues that regulations should be evaluated against their expected impacts, positive and negative, rather than evaluated only by the presence or absence of effective competition. We might call this position the 'effective regulation view'.

This article explores some of these regulatory questions in the context of the Victorian retail energy market. It considers some of the positions taken by the Australian Energy Market Commission (AEMC) in their advocacy of full price deregulation and assesses them against a system of regulatory principles developed by Kraus (2005).

## **Deregulation and Competition in the Victorian Retail Energy Market**

The provision of energy (electricity and gas) to households involves generation, distribution and retail. Each of these realms constitutes a discrete area of regulation, policy and market structure. The retail function itself is primarily: procurement of energy, meter reading, billing and collection of payment (Salies & Waddams Price 2004). The Victorian retail market prior to 1<sup>st</sup> January 2009

was regulated by price control agreements between host retailers and government. Through an amendment to the Electricity Act, the Victorian Parliament removed tariff regulations for standing offers from 1 January 2009.

There are 13 energy retailers in Victoria, including three host retailers (also referred to as first tier retailers), who retail to a substantial majority of consumers in Victoria and for whom regulated tariffs were set. The other retailers (referred to as second tier retailers) offer market contracts, generally at a rate discounted from the set tariff and have collectively built up a nearly 20% share of the retail energy market (AEMC 2007a).

During the initial stage of the privatisation and deregulation of energy markets in Victoria, price regulation was introduced as 'a transitional measure until an effectively competitive retail market had developed' (Victorian Hansard from 2000 cited in AEMC 2007a:45). This position accords with the 'competitive discipline view' as outlined above. After a process of privatisation, full retail competition was introduced in Victorian energy markets in 2002. The Australian Energy Market Commission, in accordance with the terms of the Australian Energy Market Agreement and the request for advice from the Ministerial Council on Energy, reviewed the effectiveness of competition in electricity and gas retailing in Victoria. In accordance with the 'competitive discipline view', competition was found to be effective, and the Commission to provide advice to the Victorian Government and the Ministerial Council on Energy on ways to phase out retail price regulation. The AEMC produced two reports in its *Review of the effectiveness of competition in electricity and gas retail markets in Victoria*. These reports found competition to be effective and proposed a number of measures to remove the price regulations.

In order to better establish the arguments for or against regulation in this area, a brief discussion of some established policy principles for the use of regulation follows.

## Regulation and Energy Retail

Regulation has been defined as the use of a government's power to coerce for the purpose of restricting the decisions of economic agents (Viscusi et al 2000). Intervention on behalf of consumers will be justified if the benefits to consumers outweigh the associated administrative, enforcement and compliance costs associated with the intervention (Smith 2000). Direct regulation may be appropriate where the government is desirous of achieving some social objective or where competition is absent or weak and is unlikely, at least for some time, to develop (Smith 1998).

Kraus (2005) lists a number of reasons for regulation:

- economies of scale and natural monopoly (long-run average cost declining as firm size increases);

- excessive competition, external economies (consumption or production activities affecting the cost/benefit function of other economic units positively or negatively);
- information asymmetry (principal-agent situation);
- public goods (collective consumption goods versus pure or impure goods), trade-cycles;
- protection of infant industries (e.g. administered renewable energy markets);
- bounded rationality;
- moral hazard (agents act in ways that incur costs which they do not have to bear);
- co-ordination problems;
- transaction cost (to the extent consumers or producers incur costs for information about market opportunities, markets will not perform efficiently).

We will use this system of regulatory principles to evaluate the likely impact of price deregulation in the Victorian energy market.

## Bounded Rationality – Choice and Comparison

In this case the good or service is electricity retail. It is uniform and without distinguishing characteristics from one supplier to another. Competition between suppliers is limited to price, contract conditions, non-price benefits and marketing rather than the product itself. Given this homogeneity of product, consumers tend to view electricity as a 'low involvement commodity' and are not inclined to undertake market searches to find superior price or service offers (AEMC 2007a).

The AEMC's *First Draft Report* finds that as the perceived search and switching costs tend to outweigh the perceived benefits available to switchers, retail customers tend not to seek out information about competing contracts and exhibit a status-quo bias. In this environment, retailers focus their attention on 'direct marketing' with door to door sales and promotions offering the most effective technique for retailers to persuade consumers to sign over their contracts (AEMC 2007a).

Regulations do not prevent retailers from marketing their products with reference to other market contracts, or with a complex array of set and variable costs which may better fit the needs of some consumers (AEMC 2007a). Nevertheless standing offers are an important reference point. One retailer quoted in a survey of retailers stated:

'We've seen customers turn away from us on the basis that we've had them on... a daily charge with a lower energy

cost...it's the standing offers on the base level tariffs that are creating that effect in the market' (second tier retailer). (Wallis Consulting 2007:15)

Energy markets in the U.S. with similar structures of fixed prices for incumbents and market prices for new entrants show that the regulations have a similar standardising effect across all retailers (Bushnell et al 2007). It is here that retail price regulation emerges as an important factor in consumer behaviour. The AEMC report finds that the regulated price, or 'standing offer' previously provided a benchmark for both the level and structure of retail price offers (AEMC 2007a).

[R]etailers have continued to price by reference to the standing offer, primarily because it allows for some simple comparisons to be made in an environment where customers want information that is easy to understand. (AEMC 2007a:51)

Direct marketing and easy to understand price comparisons are likely to motivate some customers to switch retailers. The AEMC's *First Draft Report* (2007a) used international comparisons to establish that the Victorian market was 'hot', with 20%-26% switching rates prior to deregulation, with Victoria occupying the highest category of customer switching internationally, with most other markets considered 'dormant'. The AEMC's *First Draft Report* (2007a) does not consider the effect of set-price tariff benchmarks in the success of the Victorian market, nor compare the success of other markets with respect to price regulation.

## Information Asymmetry - Consumer Protection

Effective competition does not in and of itself protect consumers from the exercise of market power by incumbent retailers. Articulating this point, Rhonda Smith, an influential Australian policy maker in the area of consumer protection<sup>1</sup>, says:

Consumer protection issues are often assumed only to arise in markets characterised by limited competition. In such markets, consumers have little or no choice of supplier and so have limited bargaining power. However, the intense rivalry in markets characterised as highly competitive may also give rise to competition issues, albeit of a somewhat different nature. (Smith 2000:411)

One of Kraus' reasons for regulation is information asymmetry. Information asymmetry can allow market power to be exercised by incumbent retailers against their rivals and consumers, despite the presence of effective competition. Smith elaborates:

[R]ather than market structure, it is the nature of goods and services and the cost of obtaining and processing information that may place consumers in a poor bargaining position. (Smith 2000:408)

In a deregulated environment, retailers clearly intend to change the way they structure their products. One first tier retailer quoted in the consultants' survey noted:

We expect that as the market further matures and as regulation in respect of market contracts is reduced, there will be significant product innovation. (Wallis Consulting 2007:16)

As innovation develops across the market, increasing complexity is likely to emerge, with implications for greater information asymmetry. On the other hand, market offers presented in reference to the set price tariff allow consumers a clear, low search-cost mechanism for price comparison.

Without this benchmark, the cost to consumers of searching for, comparing and comprehending the various offers is likely to increase, particularly for those customers without the resources to allow them to do so efficiently, such as an internet connection, and literacy and numeracy skills. As the search cost increases, so will the disincentive to seek out better offers and switch retailers. Accordingly, retailers may increase prices to current customers confident that the likelihood of their switching to another retailer is reduced. This dynamic leads to an increase in market power of incumbent retailers. Defining market power, Smith says:

Market power may be defined as the ability to 'give less and charge more'. It refers to a situation where a firm (or group of firms acting jointly) has discretion in its decision making because it is free from constraints imposed by competition. (Smith 1998:17)

The AEMC's *First Draft Report* (2007a) acknowledges the importance of consumer information on price restraint:

The exercise of informed customer choice among competing suppliers and their products and services... constrains the behaviour of retailers as they strive to retain customer patronage and increase their share of the total number of customers. (AEMC 2007a:23)

Yet it does not consider the effects of removing the price regulation on customers seeking to inform themselves.

One important tool for effective and easy comparison of differing market offers are online comparator services. Internet ISP customers, for example, are well served in Australia by the [www.whirlpool.net.au](http://www.whirlpool.net.au) website providing comprehensive information on various internet services with comparisons on price, benefits and conditions, along with extensive reviews and discussions from users. The retail energy market would be well served by such a service, but the AEMC suggests in their *Second Draft Report* (2007b) that developments in this area have stalled because retailers are reluctant to provide information enabling comparison.

The *First Draft Report* (AEMC 2007a) acknowledges that the ra-

tionality of an informed consumer is vital to a healthy competitive environment:

The extent to which customers are willing to participate by actively making decisions about their energy supply arrangements will also depend on the presence or magnitude of search and switching costs relative to the benefits available from changing retailer. (AEMC 2007a:85)

However, the *First Draft Report* (AEMC 2007a) seems blind to the possibility that removing the set-price tariffs will dampen the market by increasing the search and switching costs for consumers. It failed to consider consumer information within its criteria for assessing the effectiveness of competition (AEMC 2007a) or in its analysis of effective competition (AEMC 2007a). Den Hertog (2003) specifically lists such transaction costs as a market failure justifying government regulation. This type of 'ex-ante' regulation applies in most European states (see Kraus 2005).

From the consumer protection perspective, at least two of Kraus' justifications for regulation are present: transaction costs and information asymmetry.

## Public Goods - Social Equity

Electricity is an essential service. The lighting, cooking, heating and hot water we enjoy from electricity are associated with a decent, minimum standard of living (Dufty 2007). Research indicates that pensioners consume energy at a rate below average household consumption, but as a proportion of income, they consume at almost double the rate of average households (Dufty 2007:63).

If deregulation of set price tariffs can be shown to affect lower income groups disproportionately, then they can be said to reduce social equity in this sector and in the Victorian economy generally.

Research and commentary on the social equity implications of energy deregulation has been extensive in the UK. Having travelled down the road of privatisation and deregulation of energy utilities further and earlier than Australia, experiences in the UK can be useful to understand the likely outcomes of further deregulation in Victoria.

## UK Comparison

The household retail part of energy markets was first opened to competition in the UK in 1998. After a process of progressive introduction, full price competition in all sectors of the market applied from April 2002 (Salies & Waddams Price 2004). In the aftermath of liberalisation, critics have argued that customers with lower incomes fared worse in the new system (Otero & Waddams Price 2001, Green 2005).

Unlike the Victorian energy markets, energy retail in the UK provides for three different payment methods; standard credit (payment in arrears after receipt of a quarterly bill); direct debit (monthly amounts deducted from a customer's bank account); and prepayment, where supply is activated by insertion in the meter of a precharged 'smart card' or key (Salies & Waddams Price 2004). In 1998, 15% of UK energy consumers used prepayment meters and about half of these received welfare entitlements (Ofgem 1998). Customers unable to pay initial security deposits for standard credit or direct debits, or those who have been unable to pay previous debts accrued to retailers have little choice but to use this system, while some customers choose prepayments as a way of budgeting.

The performance of the market in the prepayment sector is indicative of how it impacts on disadvantaged people. The increased cost of metering and retailing the smart cards was reflected in higher tariffs prior to deregulation. Thus a continued premium for this product is not necessarily evidence of poor market performance. A study by Salies and Waddams Price nevertheless found that the prepayment market was 'much further from being competitive than for the other two payment methods', that 'there is more general market power in the prepayment market, where marketing is less aggressive and fewer consumers have switched [supplier]', 'the markets are effectively bifurcated, with some consumers resistant to switching, so the incumbent mark-up indicates exploitation of market power for these non switchers. This raises distributional concerns insofar as this part of the market generally has lower income than those who switch' (2004:31). The trend towards lower competition for prepayers has continued. In the most recent figures available, the switching rates for gas and electricity supplier were respectively 10% and 5% less than average customers (Ofgem 2005:7). The lower rate of switching, and corresponding lower rate of competition, is reflected in a slightly increased difference between average prices for prepayment and other payment options between 1999 and 2005 (Ofgem 2005). Social equity in energy provision has decreased with privatisation in the UK.

## Inequity in Access to Information

An economics study by Posen and Puhakka posits 'two different classes of people coexisting in an economy – those for whom information is costless to gather and process, and those less able to gather and process the information' (1997:232). It is the latter group who are least able to afford rising energy costs and least able to negotiate the increasing complexity of tariff innovation. It is this cohort who will be most vulnerable to exploitation by incumbent retailers.

## Cross Subsidies or Cost Reflective Pricing?

Apart from the lack of competition for the lower income and con-

sumption market, deregulation is likely to further afflict those on low incomes as a result of a move towards 'cost reflective pricing'. Retailing energy incurs certain fixed costs, regardless of energy use – meter reading, billing and collection of payment. Where the energy consumption of the household is higher, the bill is larger and the fixed cost is a correspondingly lower proportion of overall costs incurred by the retailer. Households with higher energy consumption are therefore more profitable for retailers, and lower consumption households less so. It is in this sense that a fixed tariff for all households results in an effective cross subsidy from high consumption households to low consumption households. Electricity is a normal good in the sense that as income increases, so does consumption (Dufty 2007). In this sense, a regulated price benefits social equity in general by high income earners subsidising low income earners. Under deregulation, this situation is likely to be replaced with a move to 'cost reflective pricing', a view supported by a submission made by the Energy Retailers Association of Australia (ERAA), in response to an Issues Paper released by the AEMC on 1 June 2007.

It is our view that the most significant issue that stifles competition and innovation in the Victorian market is the maintenance of retail prices, which effectively inhibits competition by introducing cross subsidy between the classes of customers, and results in customers avoiding cost reflective pricing. (ERAA 2007:4)

The matter of equitable access to the benefits of competition and the potential pitfalls of deregulation for disadvantaged consumers and those imposing higher fixed costs on retailers was acknowledged in the *First Draft Report* (AEMC 2007a) and has been a matter of advocacy and debate. The *First Draft Report* (AEMC 2007a), however, fails to consider the potential benefits of current price regulation for these customers and instead discusses some policy options for mitigating the harm done to them by further deregulation.

Cross subsidisation in the energy market is a matter of public ethics and equity, not merely a matter of market efficiency or of the retailers' best interests. Establishing the level of public support for price deregulation and its effects upon disadvantaged people should have played a role in the AEMC's review. It had an opportunity to do so within the parameters of research studies it commissioned to inform its report.

In gathering the data underpinning the *First Draft Report*, the AEMC (2007a) commissioned two research surveys – a *Retailer Study Research Report* and a *Consumer Research Report*, both completed by Wallis Consulting of Melbourne. The *Consumer Research* surveyed 1000 domestic households and 500 businesses across Victoria 'in order to assess consumer awareness, engagement, experience and attitudes towards retail competition in the electricity and gas markets' (AEMC 2007a:i).

The survey and its results were well structured and executed, with a high level of professionalism. The data gathered provided vital information for the AEMC review and added significantly to the weight of its conclusions. However, the consultants' report did not investigate public perceptions of the set price tariff, nor its effects upon consumer behaviour. It did not inquire as to the understanding of, or support for, the social equity and cross subsidy functions of price regulation. In this sense the report failed to consider a crucial dimension of the deregulation case.

Clearly another of Kraus' rationales for regulation is apparent, that of public good –in this case the good of social equity.

## Moral Hazard - Environmental Sustainability

The *First Draft Report* (AEMC 2007a) also failed to take future carbon constraints into account. The UK Stern (2007) report urges regulation of carbon emissions, with clear implications for carbon intensive energy generation. This will create significant change in the energy market, where the costs of transition must be borne by government, industry and citizens. Böhringer & Lange (2005) emphasise the importance of policy in this process:

Energy utilisation plays a central role in solving environmental problems and in implementing sustainable economies in the medium to long term. To promote the transition towards environmentally compatible energy systems, far-reaching policy measures are required. (Böhringer & Lange 2005:4)

Any changes to government set price controls must take account of the effect they will have on the ability of future governments to achieve equitable and effective transition to renewable energy infrastructure. For example, future governments may use price regulations to affect consumer behaviour, fund new infrastructure, or provide incentives for investing in domestic energy generation. Price regulation may be an important policy lever in reducing carbon emissions. While price controls may be used for this purpose, there is evidence to suggest that price deregulation may have the opposite effect. The *First Draft Report* (AEMC 2007a) found that:

[H]igh energy use customers who pay on time and in full are attractive to many retailers and marketing efforts may give priority, at least initially, to locations where households and small businesses best fit this profile. (AEMC 2007a:16)

Concentrating marketing efforts towards high income households will increase competition for this demographic, driving down prices. Add to this the dynamic of cost reflective pricing, and we can foresee a situation where households who consume more power pay relatively less for it. Where there is a collective interest in reducing consumption, this is a perverse outcome.

Deregulation will result in a situation where agents act in ways that incur environmental costs which they do not have to bear. This

qualifies as another of Kraus' justifications for regulation, that of moral hazard.

## The Costs of Regulation

Before concluding in favour of price regulation in light of Kraus' principles, we must also consider the costs of regulation, the single argument advanced by the AEMC in favour of price deregulation.

The AEMC takes as its premise the orthodox neo-liberal assertion that regulation can impose costs and inefficiencies. The AEMC's review argues:

regulated prices will almost always provide an imperfect substitute for those prices determined in a competitive market and are likely to impose costs and distortions not present in the competitive market. (AEMC 2007b:5)

While neo-liberal orthodoxy may compel this conclusion about abstract market efficiency, how much distortion do the regulations cause? A fair price may be described as one where the retailer is able to make a return on their investment commensurate with other investment opportunities (see AEMC 2007a). It appears that in Victoria the set price tariffs are in line with or above a fair price, at least in respect to wholesale electricity costs. This is evidenced by the *First Draft Report's* (AEMC 2007a) finding that:

Margins available under the standing tariff, for electricity, appear not to have prevented efficient new entrants from being profitable at least when considered on average across all customers in a distributor's service area. For gas, however the results at this stage indicate that the scope to offer discounts off the standing offer tariffs may have been more limited. (AEMC 2007a:138)

One of the arguments against the set price tariffs is that they may constrict margins to the extent that they prevent the access of new entrants to the market. The absence of new entrants will lessen the competitive discipline on other retailers. This is a due concern, yet given the *First Draft Report's* (AEMC 2007a) above findings, and the state government's demonstrated willingness to increase set retail prices along with wholesale costs (Batchelor 2007), there does not seem to be grounds for concern. The AEMC's (2007b) *Second Draft Report* notes only one retailer reporting difficulty within margins at the time.

There was nevertheless considerable support among retailers for price deregulation (see AEMC 2007a). We may speculate that this support arose from retailers' motive to maximise their profits rather than a concern for the effectiveness of market competition.

## Lifeline Cap and Bounded Market Pricing

The AEMC's proposal for deregulation of standing tariffs is not the

only model. Dufty (2007) proposes a 'lifeline' price cap, where a regulated price for a quota of electricity is set commensurate with a minimal household usage and a fair price for retailers. Prices above this cap would be subject to full retail competition.

This is a compromise proposal. On the positive side, the energy charged within the capped rate avoids all the bounded rationality, information asymmetry, public good and moral hazard problems of full price deregulation, while providing the efficiencies and disciplines of the market above the capped rate. On the negative side, it involves the imperfect pricing, costs and inefficiencies of regulation below the capped rate, and falls foul of the information asymmetry, transaction costs, social equity and moral hazard problems above the cap.

Where this proposal gains its strength is in its protection of and reward for those households who consume smaller amounts of electricity; those on low incomes and/or those with sound environmental practices. Protecting these households from being punished by the market for their unprofitable custom must be a high priority for government regulators.

## Conclusions

The debate around Victoria's energy market price regulation demonstrates the erroneous nature of claims that only free markets are efficient, effective and in the public interest. Dogmatic adherence to the 'effective competition view' is not sustainable in the light of the evidence in the Victorian context. The AEMC has taken the evidence of effective competition as sufficient reason to deregulate prices, but we have argued that the likely impacts of deregulation must also be considered.

The sole argument in favour of deregulation is the cost imposed upon the market by regulation. We have shown that in Victoria the regulated price did not hold prices below a fair return on investment for the retailers, and that these regulations also fostered greater competition in the market through greater price transparency and consumer comparison. We have also shown that there are a number of costs associated with deregulation.

Deregulation will increase the benefits of incumbency and dampen competition, particularly for low consumption households. Price deregulation will result in low consumption households paying a higher rate for their energy than high consumption households, eroding social equity by shifting a greater burden to disadvantaged people. Deregulation is also likely to erode efforts to curb carbon emissions as it leads to cheaper prices for higher consumption levels and higher prices for lower consumption.

Regulatory policy must consider more than the effectiveness of competition. Kraus outlines a suite of reasons for regulation, a number of which are apparent in the retail energy market – bound-

ed rationality (choice and competition), information asymmetry (consumer protection), public goods (social equity) and moral hazard (environmental sustainability).

Dufty's proposal for the 'lifeline cap' of an energy quota at a fixed rate, with a market rate beyond the cap protects low energy consumption households from being punished by the market place for their unprofitable custom.

More broadly, it is evident that the success of privatisation of public utilities depends partly on new and innovative regulatory regimes. Regulations need to capitalise on the efficiencies of private companies and market discipline while coercing market operators to serve the public interest. Claims that effective competition alone will sufficiently provide for the public interest are too simplistic, and in the light of the evidence, not sustainable.

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## Endnotes

1. Rhonda Smith is a former Commissioner with the Australian Competition and Consumer Commission and has published extensively on competition law and consumer protection.

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