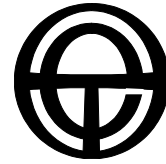


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## **SUBMISSION**

**Phase out of retail price regulation for  
electricity and natural gas:**

**Draft Effective Competition Criteria**

**Consultation Paper**

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# Draft Effective Competition Criteria Consultation Paper

## 1. Introduction

### 1.1 Competition issues

The National Electricity Market (the NEM) grew out of a perceived need to incorporate competition into energy markets, both across state boundaries and within the jurisdictions. It has been an evolving process which has largely overlooked the environmental impacts of energy generation and distribution. The proposed set of criteria continues to perpetuate the notion of a NEM that is divorced from the concern of many customers that in Australia – and particularly in Victoria and NSW – energy generation is predominantly based on fossil fuel industries that are generating massive levels of greenhouse gas emissions. As noted on the Green Power website, “Australia is the highest per capita emitter of greenhouse gases amongst developed nations.”<sup>1</sup>

Consequently the criteria do not address promotion of greenhouse-gas avoiding retail infrastructure and products, even though they are part of national programs. Notably the popularity of Green Power contracts – and products – is increasing annually. The support of the Council of Australian Government (COAG) and the Ministerial Council on Energy (MCE) for the greater penetration of so-called smart interval meters into the market provides opportunities not only for new infrastructure products – the meters themselves – but also for a range of new retail products once businesses develop a range of linked tariffs. There is an opportunity to grasp the realities of climate change here, by promoting the potential for reduced greenhouse impacts through targeted criteria.

A blanket principle for moving to open markets also does not incorporate the notion of social benefit, as referred to briefly in the Consultation Paper. This is not only in terms of jurisdictional regulations but also in relation to the fact that electricity is not an ordinary product – it is an essential service, which 99% of Australian households depend on, and which is critical for life and health for many customers. In response to this, the Victorian Essential Services Commission recommended that “an energy regulatory safety net be continued after 31 December 2004. This would protect the interests of all small energy customers in *accessing* what are essential services in today's society and, in particular, to protect the interests of more vulnerable energy customers in the competitive energy retail market.”<sup>2</sup>

The retail market thus cannot be structured solely as if electricity were a non-essential product, nor a concrete object (partly because it cannot be stored). This means “rivalrous market behaviour” and “independent rivalry” are not entirely appropriate in this context, since cut-throat treatment of customers – such as disconnections with no warning – may undermine the social good that electricity can provide.

Discussion of retail regulation in such terms as, “suppliers may be able to exercise market power”, ignores the reality that aspects of the NEM rely on natural monopolies

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<sup>1</sup> Green Power, *What is Green Power?* <http://www.greenpower.gov.au> accessed on 25 June, 2006

<sup>2</sup> Essential Services Commission, *Special Investigation: Review of Effectiveness of Retail Competition and Consumer Safety Net in Gas and Electricity*, Overview report to Minister, June 2004, p 7

(particularly transmission) and non-diverse generation. We reiterate – most generation is based on fossil fuels and large generators, and there are many impediments to the development of small generators using alternative technology. Therefore, retail markets are limited in the products they can offer by the type of generation that exists, and retailers generally cannot themselves choose their transmission and distribution providers (which are geographic monopolies).

As such, the concepts and mechanisms of “pure” competition do not entirely fit. Electricity cannot, in fact, be divorced from social and environmental objectives and therefore these must be taken into account when assessing “the effectiveness of competition”.

There is also some debate as to whether full competition does deliver benefits for the customer. The assumption that it necessarily leads to reduced prices and improved marketing does not hold true for the whole market. For instance, the Victorian Essential Services Commission noted: “The Commission’s analysis has also identified relatively large groups of customers that are not currently participating in the energy retail market and are not being directly targeted by retailers’ marketing campaigns. These customers provide low or negative margins relative to the standing offer prices and tend to be lower volume and more remotely located energy users, and may also have relatively high off-peak energy consumption.”<sup>3</sup>

## 1.2 Recommended criteria

We have restricted our comments in this submission to electricity and the NEM. Our proposed criteria for inclusion within the Australian Energy Market Agreement indicators are:

- accuracy and penetration of Green Power promotion and standing customer information (AEMA criterion 1)
- rate of take up of Green Power – total numbers and switching (AEMA criterion 2)
- range of Green Power products (AEMA criterion 3).
- progress of roll out of smart meters (AEMA criterion 3)
- penetration of advanced meters with remote communications facilities for tracking demand and with load shedding capacity (AEMA criterion 3)
- development of flexible tariffs to incorporate time of use and to incorporate demand reduction (AEMA criterion 2 & 3)
- take up of tariffs which encourage demand management – total numbers and switching (AEMA criterion 2)
- promotion and take up of advanced meters with remote communications facilities for tracking demand – total numbers and switching (AEMA criterion 2)
- access for household generators (a form of embedded generation) using renewable energy – to be incorporated in tariffs/access (AEMA criterion 3)
- take up of micro and on-site generation of renewable energy technology.

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<sup>3</sup> Essential Services Commission, *Special Investigation: Review of Effectiveness of Retail Competition and Consumer Safety Net in Gas and Electricity*, Overview report to Minister, June 2004, p 13

That is, we recommend an additional set of criteria for electricity referring to the take up of Green Power, advanced meters and flexible tariffs, and embedded generation/renewable energy. Both total numbers and switching rate need to be included, as the total is likely to indicate satisfaction with the product.

## 2. Issues and criteria

TEC considers that there are three main areas where the establishment of additional criteria is important for providing effective competition for innovative products and services:

- Green Power
- Interval meters and flexible tariffs
- Embedded generation/renewable energy.

These three need consideration within the Australian Energy Market Agreement, particularly:

- Indicator 1 – Customer experiences
- Indicator 2 – Customer switching
- Indicator 3 – Price and non-price offers.

### 2.1 Green Power

Green Power is a nationally accredited scheme to promote development of renewable energy. It is based on the retailer agreeing that an equivalent amount to that consumed will be produced by renewable energy generation. Following the rapid growth in retail competition and the growing awareness that greenhouse emissions can be reduced by switching from fossil fuel fired electricity to renewable electricity, at least 27 'green' electricity products have come onto the market, some of these under the banner of Green Power accreditation. There has been inconsistent participation nationally in the scheme, probably due to variable promotion by retailers. For instance, in the second quarter of 2006 there were 120,121 customers in Victoria but only 55,317 in NSW<sup>4</sup>.

However, the explosion of unaccredited, misleading 'green' electricity products by numerous retailers is a growing problem. These products confuse and mislead customers by selling fossil fuel generated power under the banner of 'green' electricity. This activity, by association, is tarnishing the reputation of accredited Green Power. The capture of new customers in unaccredited 'green' electricity contracts also reduces the number of customers available to buy accredited Green Power, effectively decreasing the capacity of customers to reduce their greenhouse emissions. Price and environmental benefits are the two main features that distinguish one retail product from another, which makes disclosure of environmental benefits more important for electricity than for most other products.

TEC considers that several electricity retailers are engaging in a variety of misleading activities, such as:

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<sup>4</sup> Green Power, *Quarterly Report Q2 2006*, <http://www.greenpower.gov.au>, accessed 18 August 2006, p 2

- Making misleading claims about the benefits of products
- Presenting information about products that is likely to result in misinterpretation
- Exaggerating the environmental benefits of their products
- Failing to substantiate or verify claims
- Claiming benefits that already exist.

For effective competition it is critical that customers are properly informed about what products are being offered so they can make genuine choices.

Recommended criteria:

- accuracy and penetration of Green Power promotion and standing customer information (AEMA criterion 1)
- rate of take up of Green Power – total numbers and switching (AEMA criterion 2)
- range of Green Power products (AEMA criterion 3).

## 2.2 Interval meters and tariffs

Economic efficiency is central to the NEM. To achieve this there must be equal emphasis on demand and supply as the basis of standard economic regulation. Demand management<sup>5</sup> (DM) and energy efficiency must therefore be given high priority and be integrated in uniform national regulation. DM in all its forms must be recognised as a viable alternative to current attitudes and actions throughout the NEM because of the benefits that it delivers to customers. The NEL Objective is set up to cater for "the long term interests of consumers"; without effective DM this is not being achieved.

A report for Energy SA<sup>6</sup> gives a useful list of examples of demand side management opportunities:

- energy efficiency programs
- load shifting
- load curtailment
- tariff structures and metering
- embedded generation, including fuel switching issues
- distribution network constraints, which provide opportunities for DM.

Smart meters (with face-to-face communication displays) when linked with true-cost reflective pricing have the potential to promote demand management by customers and thus offset greenhouse gas emission. In 2001, the Victorian Essential Services Commission acknowledged the benefits for competition: "The Commission has decided to

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<sup>5</sup> DM in this submission can be read to include 'demand response', 'demand side management', 'demand side response', 'energy efficiency' and 'non-network solutions'. In general, DM can include both the management of peak loads and energy efficiency as a way of meeting capacity requirements most cost effectively. It includes a diverse array of activities that meet energy needs, including cogeneration, standby generation, fuel switching, interruptible customer contracts, and other load shifting mechanisms.

<sup>6</sup> Energy SA, *Demand Side Management – Benefits to Industry & the Community*, 2001, p 5

mandate the progressive rollout of interval meters to small customers to facilitate competition, and for customers to more efficiently manage their energy consumption and expenditure.”<sup>7</sup> Then in 2006 the Victorian Government decided to speed up the process and have smart interval meters installed across the state in an accelerated program.

Interval meters can record usage according to the time and therefore the current price, which can be up to \$10,000 per kWh in periods of critical peak demand. The optimum type is one that allows for remote communication and the potential for add-ons by the customer. These include remote disconnection of air conditioners or pool equipment and in-house displays to monitor use, price and emissions or savings. Linking associated tariffs to the time of use – in particular critical peak periods – can reward customers for using electricity during off-peak periods, and encourage high energy users to cut down on electricity waste. Tariffs which reflect price signals for critical peaks are also essential.

Nonetheless, no retailer has made available the appropriate tariffs to facilitate the greatest reductions. Without adequately aligned tariffs, smart meters can only be used to record consumption over time, masking the true costs (and potential savings) of electricity consumption.

According to the National Electricity Rules which regulate the NEM, metering procedures should be “economically efficient”. This gives further support to the installation of advanced interval meters, which make transparent the costs of electricity in times of peak demand, rather than relying on the existing accumulation meters and the corresponding tariffs which average (or “smear”) the cost out over the billing period. At present, the system of smearing means that low energy users are effectively subsidising high energy users. Customers – whether residential, commercial or industrial – need to be informed of the variable costs of their electricity, and this will only happen if they are kept up-to-date with their usage and the associated cost.

Current pricing plans where interval meters have been installed in Australia tend to be block tariffs, with three basic rates – peak, shoulder, and non-peak – or there are off-peak rates for particular appliances like water heaters. For greater freedom of choice and greater control over consumption, retailers need to provide a variety of plans for all customers much like phone companies do. The first-offer pricing system could be based on block tariffs, with additional plans related to real-time pricing. The success of complex plans for phone use and Internet use demonstrates that many people will indeed shop around for a tariff system that suits their usage best.

Recommended criteria:

- progress of roll out of smart meters (AEMA criterion 3)
- penetration of advanced meters with remote communications facilities for tracking demand and with load shedding capacity (AEMA criterion 3)
- development of flexible tariffs to incorporate time of use and to incorporate demand reduction (AEMA criterion 2 & 3)

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<sup>7</sup> Essential Services Commission, *Special Investigation: Review of Effectiveness of Retail Competition and Consumer Safety Net in Gas and Electricity*, Overview report to Minister, June 2004, p 7

- take up of tariffs which encourage demand management – total numbers and switching (AEMA criterion 2)
- promotion and take up of advanced meters with remote communications facilities for tracking demand – total numbers and switching (AEMA criterion 2).

### **2.3 Embedded generation/renewable energy**

Renewable and embedded/distributed generation provide a range of benefits that are not currently recognised in the NEM. As well as improving efficiency, these too can contribute to competition in the expansion of product possibilities. Other benefits include:

- reduced greenhouse gas emissions, because of the form of energy and from reduced transmission losses
- improved supply reliability through generation diversity
- reduced greenhouse gas emission costs
- improved power quality and reduced power losses because of generation closer to customers
- avoided network augmentation costs.

A further benefit of embedded generators is that they can offer customers in rural communities a more reliable alternative to the standard distribution network. Small communities often lack the financial resources to attract system expansions and often suffer more greatly from outages based on system constraints at the end of the line.

Recommended criteria:

- access for household generators (a form of embedded generation) using renewable energy – to be incorporated in tariffs/access (AEMA criterion 3)
- take up of micro and on-site generation of renewable energy technology.