



MINISTRY OF  
SOCIAL DEVELOPMENT  
*Te Manatū Whakahiato Ora*

Date: 3 August 2007

## MARKET DESIGN REVIEW - SURVEY OF MARKET PERFORMANCE

### Background

---

- 1 The Ministry of Social Development (MSD) has over 9,600 staff and a presence in many locations, with around 200 frontline sites that serve more than one million clients. MSD is responsible for a Government vote of over \$13 billion. We apply a Social Development approach to our work, which seeks to understand the social, economic, environmental and cultural realities that face our clients, their whānau and communities. Social development is about putting strategies in place to bring long-term benefits, while also taking short-term measures to meet the needs of today.
- 2 MSD is particularly interested in the electricity Market Design Review for the following reasons:
  - (a) MSD recognises that low income households in New Zealand are more likely to experience disadvantage. We are interested in the way the market performs in regard to this group.
  - (b) The reliability of electricity supply is especially concerning to those who are vulnerable. Vulnerable consumers (as per the Electricity Commission's *Guideline on Arrangements to Assist Low Income and Vulnerable Consumers*), are those that for reasons of age, health, or disability disconnection of their electricity supply would present a clear threat to their or a member of their household's health or wellbeing. If electricity is the only form of domestic heating for these households, or they are dependent on electricity for critical medical support, irregular supply may have severe health consequences for these households/families.
  - (c) The pricing and reliability of electricity supply is also concerning for consumers that live in areas with very cold winter climates.

### Issues

---

#### End User Pricing

- 3 MSD is concerned about price issues for domestic consumers, and in particular those consumers who are vulnerable or living with low incomes.
- 4 As the issues paper states (Figure 13), the trend in real prices has differed markedly across customer classes (residential, commercial and industrial). Residential prices have generally trended upwards since the early 1970s, with marked increases from 2000. Conversely, commercial prices have trended downward since 1979, while industrial prices have remained fairly stable. The current residential price is well above the prices for industrial and commercial classes. MSD also recognises that the cost of electricity, both lines charges and kilowatt hours varies regionally, and often those consumers in low socioeconomic rural areas

will be charged at a higher rate than those in more affluent urban areas. Rising electricity prices are likely to push more people into a state of fuel poverty, as their home energy costs take up a greater proportion of household incomes. Health impact assessments have shown that there is a significant health danger in living in inadequately heated homes, and rising electricity costs may deter people from heating their homes to a safe level.

- 5 The issues paper states that although domestic electricity prices have risen significantly in recent years, the proportion of household expenditure on domestic fuel and power has remained fairly stable. A University of Otago study into the incidence of fuel poverty in New Zealand emphasises the key issue is not what people *actually* spend on fuel, but what they would *need* to spend.<sup>1</sup> Fuel poverty has been defined as occurring when households "...need to spend more than 10% of their income on all household energy fuels in order to achieve a satisfactory indoor heating regime..." The research showed that around 30% of households in Dunedin are likely to be in a situation of fuel poverty and that between 10% and 30% of New Zealand households, or some 400,000 people, could be living in fuel poverty nationwide. Research undertaken by BRANZ Limited supports this, and shows that lower income households are over-represented in those dwellings which would be described as "cold" or "below average" in terms of evening living room temperatures.<sup>2</sup>
- 6 The University of Otago study further demonstrates that using *actual* energy expenditure as a measure of affordability (both in New Zealand and in comparison with other countries), rather than *required* energy use is problematic. When compared with other countries, New Zealand households are found to be very frugal in terms of energy use. An International Energy Agency Report stated that New Zealand had "...the lowest space heating intensity...of all the countries studied." Figure 17 in the issues paper "...indicates that Australian households on average allocate a very similar proportion of total expenditure on fuel and power." However, in 1995, New Zealand residential energy use was 17 gigajoules per capita per annum, compared with 35 gigajoules per capita per annum in Australia. The fact that New Zealanders use so much less domestic power than Australians may indicate that this comparison is flawed. If New Zealand households were heated to recommended safe levels, the proportion of income that was spent on electricity could be very different to that in Australia.
- 7 The issues paper at page 16 states that other fuel sources may have been substituted for electricity in response to increases in domestic electricity prices. However, the new clean air regulations will decrease the number of domestic solid fuel burners in use. As a consequence of this there may be an increase in domestic electricity usage, which could lead to households spending an increased amount of their income on power.
- 8 Again, the use of national trend data may be problematic, and an analysis undertaken at a regional level may be more helpful. Those that live in cold areas are more likely to spend (or need to spend) a greater proportion of their household income on fuel and power.
- 9 The issues paper states that New Zealand's relative price ranking has deteriorated over recent years. A more useful comparison may be with countries with similar climates. Figure 21 shows that the price ratio compared to Australia for residential electricity is over 100%, and the differential ratio between industrial and residential electricity prices is increasing.

---

<sup>1</sup> Lloyd, B. "Fuel Poverty in New Zealand" *Social Policy Journal of New Zealand*, 27, March 2006 pp. 142 – 155.

<sup>2</sup> Isaacs, N.; Saville-Smith, K.; Amitrano, L.; Camilleri, M.; French, L.; Pollard, A.; Fraser, R. Rossouw, P. and Jowett, J. 'Energy Use in New Zealand Households: Report on the Year 10 for the Household Energy End-Use Project (HEEP)' BRANZ *Study Report 155* BRANZ Ltd, Judgeford, New Zealand.

- 10 The Ministry notes that the price of electricity for residential consumers has increased substantially since deregulation, and in particular over the last few years. This has given rise to public concern about profits. Given this concern, and the impact of electricity costs on vulnerable and low income consumers, the Ministry considers that the Commission needs to be sure that the market is competitive, delivering energy prices that are fair, and that profits have not been excessive. The larger question is whether even a fully competitive market can meet the access and pricing needs of low income and vulnerable consumers.
- 11 To this end, the Commission needs to expand upon the work it has done to date on end-user pricing and retail margins, including understanding further the causes for regional variation.

### **Other Service Quality Indicators**

- 12 The Commission recognises that the data available on service quality may not be adequate. The Electricity and Gas Complaints Commission only deals with issues that cannot be resolved between a consumer and their particular retailer. These figures are not indicative of the number of complaints that may be made by consumers to their retailer, nor do they show how many consumers may “resolve” their complaint by changing retailer, or do not make a formal complaint at all. Data provided from the Consumers Institute surveys only reflects the Institute’s *members’* satisfaction.
- 13 A more detailed examination of service quality issues for electricity consumers, particularly those on low incomes, may supplement the results of the monitoring exercise to be undertaken by the Electricity Commission on retailer compliance with the *Guideline on Arrangements to Assist Low Income and Vulnerable Consumers*.

### **Retail Competition**

- 14 The issues paper, at figure 31, illustrates that in most areas across New Zealand there are retailers offering cheaper electricity than the incumbent electricity retailer. The paper states that it is unclear why consumers are not shifting in response to such price differentials.
- 15 Many retailers impose a bond on new customers, which low income consumers may have difficulty paying, so the cost of switching to a new retailer may be prohibitive. Another factor which may prevent consumers switching is that the consumer may wish to make use of alternative payment arrangements, such as pre-payment meters or a smoothed payment plan. Consumers may be deterred from switching to a cheaper retailer which does not offer these services.
- 16 The Commission should undertake a more detailed examination of the reasons behind why consumers may not be switching to cheaper providers where available, in order to satisfy itself that the market is functioning competitively. One aspect of this examination could be an assessment of consumer knowledge of the pricing options offered by retailers.

### **Reliability of Supply**

- 17 The issues paper notes that average reliability of supply has been fairly stable through the 1995-2005 period, and that there has been something of an improvement in terms of reduced frequency and lost time from interruptions.

- 18 Although the improvements in reliability at a national level are encouraging, MSD considers that the Electricity Commission should analyse the reliability of electricity supply at a regional level across New Zealand.
- 19 Reliability is particularly important to areas that experience cold winter temperatures. Consumers that rely solely on electricity for their domestic heating who live in cold climates are particularly vulnerable should they experience electricity outages. The World Health Organisation recommends that indoor living spaces should be heated to maintain temperatures of between 18 degrees Celcius and 24 degrees Celcius, and should not be less than 16 degrees Celsius.<sup>3</sup> Research by the University of Otago Wellington School of Medicine has shown that temperature variations of even a few degrees can lead to hypothermia, increased susceptibility to coronary and cerebral thrombosis and respiratory disease and death.<sup>4</sup>
- 20 Government Clean Air regulations which must be complied with by 2013<sup>5</sup> will lead to some territorial local authorities placing restrictions on the use of domestic solid fuel burners. This is likely to increase the use of electricity for domestic heating and lead to more people being in a vulnerable position in the event of supply outages.

---

<sup>3</sup> <http://www.euro.who.int/document/mediacentre/fs0403e.pdf> and

[http://www.dunedincity.govt.nz/city/?MlvalObj=feat\\_whohousesrep&MltypeObj=application.pdf](http://www.dunedincity.govt.nz/city/?MlvalObj=feat_whohousesrep&MltypeObj=application.pdf)

<sup>4</sup> Crane, J.; Howden Chapman, P.; Signal, L. "Housing and Health in Older People: Ageing in Place" University of Otago *Social Policy Journal of New Zealand*, 13, December 1999.

<sup>5</sup> <http://www.mfe.govt.nz/laws/standards/air-quality-standards.html>