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Assessment of Standby Power Utilisation in New Zealand

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Abstract

"Standby Power" refers to a product or appliance that is connected to a power source but does not produce any sound or picture, transmit or receive information or is waiting to be switched "on" by a direct or indirect signal from the consumer. This includes the "off" mode, even where there is no remote control.

Standby Power is currently a global problem in the developed world and is estimated to be responsible for 1.5 % of total electricity consumption. It contributes 0.6 % (68 million tons) of CO₂ emissions from the electricity sector. At the present time, standby power is a relatively new concept with very few statistics available on the standby power consumption in New Zealand.

To date New Zealand has not considered standby power to be important. While almost all first world countries are introducing legislation and making active movements toward reducing standby power in new appliances, New Zealand has yet to take action. There is a growing awareness of standby power in New Zealand that has gained some media coverage. However from this study it is clear that although 89% of surveyed consumers had heard of standby power, the general consumer was unaware of the extent to which standby power is emitted through appliances and the amount of power and money it consumes nationally per year. In the midst of a power crisis (at the time of writing, June, 2003), New Zealand has the capability to reduce power consumption by 10%, by turning all appliances off onto standby. Unfortunately, the lack of consumer education in regard to the extent of wastage in standby power in the average New Zealand household inhibits this saving from being made.

The possible future directions for New Zealand as a result of this study are as follows.

- Legislation needs to be put into place in New Zealand to encourage manufacturers to reduce standby power consumption of new appliances. This will help to bring New Zealand manufacturers up to standard with places like the USA, Europe, Australia, Japan and China, who are already taking active steps to reduce standby power. Legislation in other countries has shown that mandatory legislation is hard to police. A campaign educating the consumer on energy labelling and the cost of standby power teamed with a voluntary manufacturers' scheme to lower standby power consumption (using the worldwide energy star label) would be potentially effective. Previous studies

have called for a worldwide standardised standby power labelling scheme. This scheme is seen as being necessary as many New Zealand products are being manufactured overseas. The following changes need to take place to take an active approach to reducing standby power wastage:

- Research into the standby consumption of the commercial and industrial sectors within New Zealand.
- Improvements in energy labelling. Consumer education and awareness campaign with regard to energy labelling, needs to take place on a public arena. Energy labels need to be simplified so the average New Zealander can understand the energy emitted through standby power on market appliances and the amount that standby power costs both on a nation wide scale and to the individual consumer.

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Table of Contents

1.0 Introduction	6
1.1 Introduction	6
1.2 Standby Power Definition	6
1.3 Project Aim	7
1.4 List of Project Objectives	8
2.0 Literature review	9
2.1 Objectives of the Literature Review	9
2.2 Standby Power Measurement	9
2.2.1 Whole House Measurement	9
2.2.2 Bottom up Studies	11
2.2.3 New Product Measurements	12
2.3 Residential	12
2.3.1 Australia	13
2.3.2 New Zealand	15
2.3.3 USA	15
2.3.4 Europe and France	17
2.3.5 Japan	18
2.3.6 China	19
2.4 Commercial	19
2.5 Standby Trends	20
2.6 Policies and practical steps to combat standby power	21
2.6.1 Mandatory Certification Programs	22
2.6.2 Voluntary Certification Programs	23
2.6.3 Mandatory Efficiency Standards	27
2.7 Technical solutions	29
2.7.1 Power Switch Placement	29
2.7.2 Power Supplies	30
2.7.3 Power Management	31
2.7.4 Visual Displays, Lower Power Components	31
2.8 Recommendations	31
2.8.2 Viewing Standby Power from an Alternative Angle	33

3.0 Methodology	34
3.1 Introduction	34
3.2 Aims	34
3.3 Project Tasks and Output	34
3.3.1 New Product Measurement Survey	34
3.3.2 Appliance Behavioural Survey	34
3.4 New Product Measurement Survey	35
3.4.1 Aims and Objectives	35
3.4.2 Approach	35
3.4.3 Preparation and Equipment	36
3.4.4 Problems Encountered in Data Collection	37
3.5 Appliance and Behavioural Survey	38
3.5.1 Aims and Objectives	38
3.5.2 Approach	38
3.6 Interviews with Fisher and Paykel Staff	38
3.6.1 Aims and Objectives	38
4.0 Results	40
4.1 Overview	40
4.2 Washing machines	40
4.3 Clothes driers	43
4.4 Dishwashers	45
4.5 Ovens	46
4.6 Microwaves	48
4.7 Televisions	49
4.8 Video Cassette Recorders (VCRs)	51
4.9 Digital Versatile Discs Players (DVDs)	53
4.10 Stereo equipment	54
4.11 Personal Computers and Monitors	55
4.12 Home Theatres	56
4.13 Consumer Survey	57
4.13.1 Aims	57
4.13.2 Appliance features	57
4.13.3 Turn off behaviour	58
4.13.4 Energy Labelling	59
4.13.5 Consumer knowledge of Standby Power	60
4.14 Manufacturers Opinion	60

5.0 Discussion	62
5.1 Appliances	62
5.1.1 High Standby Appliance Group	62
5.2 Consumer Behaviour	63
5.2.1 Standby Power Awareness	63
5.2.2 Energy Labelling	64
5.3 Implications for the Standby Power Definition	65
5.4 Legislation	65
6.0 Conclusion	66
7.0 Bibliography	67
8.0 Appendix	70
8.1.1 Appliance Behavioural Survey	70
8.1.2 Results of Social Survey	71
8.2 Appendix 2	72
8.2.1 Results of Appliance Survey	72
8.2.2 New Product Measurement Survey	76

Tables

- Table 2.1: Results from 21 whole-house studies from around the world.
- Table 2.2: Results from the 8 bottom up studies that have been carried out to date
- Table 2.3: Australian survey results of a range of appliances showing appliance load, standby load, off load, saturation per household, market share, average units per household and average age of appliances.
- Table 2.4: Standby power of appliances in America.
- Table 2.5: Results of a survey of the standby power modes found in household appliances in 178 individual French households showing maximum, minimum and average loads for the number of appliances measured in a range of categories.
- Table 2.6: Comparisons of standby consumption averages in Japan between household appliances used in new products in the market between 1999 and 2000.
- Table 2.7: European code of conduct standby power targets.
- Table 2.8: Appliances turned off at the wall by consumers when appliance is not in use.
- Table 4.9: Appliances turned off at the wall by consumers when appliance is not in use

Figures

- Figure 2.1: LG home networking plan.
- Figure 2.2: Common power switch designs of appliances with standby power features.
- Figure 4.1: Percentage of households with washing machines (household economic survey)
- Figure 4.2: Standby power measurement for new washing machines (off-mode, 2002)
- Figure 4.3: Standby power measurements for new washing machines (active-mode, 2002).
- Figure 4.4: Percentage of households with clothes driers.
- Figure 4.5: Standby measurements for new clothes driers (off-mode, 2002).
- Figure 4.6: Distribution of low power modes in clothes driers (2002).
- Figure 4.7: Percentage of households with dishwashing machines.
- Figure 4.8: Standby power measurements for new dishwashers (off-mode, 2002).
- Figure 4.9: Percentage of households with electric ranges or wall ovens.
- Figure 4.10: Standby measurements of new ovens and ranges (off-mode, 2002).
- Figure 4.11: Percentage of households with electric ranges of microwave ovens.

- Figure 4.12: Standby power measurement for new microwaves (passive standby mode, 2002).
- Figure 4.13: Percentage of houses with colour televisions.
- Figure 4.14: Standby power of new televisions (off mode).
- Figure 4.15: Standby power of new televisions (standby mode).
- Figure 4.16: Percentage of households with video recorders.
- Figure 4.17: Standby power of new video players (passive standby mode, 2002).
- Figure 4.18: Standby power of DVD players (Off-mode and passive standby mode, 2002).
- Figure 4.19: Standby power of new stereos (passive standby mode, 2002).
- Figure 4.20: Standby power of new portable stereos (off-mode, 2002).
- Figure 4.21: Standby power of new computers (off-mode, 2002).
- Figure 4.22: Standby power of new monitors (off-mode, 2002)
- Figure 4.23: Distribution of low power modes in new home theatres (2003)
- Figure 4.24: Important factors taken into account when purchasing a new product