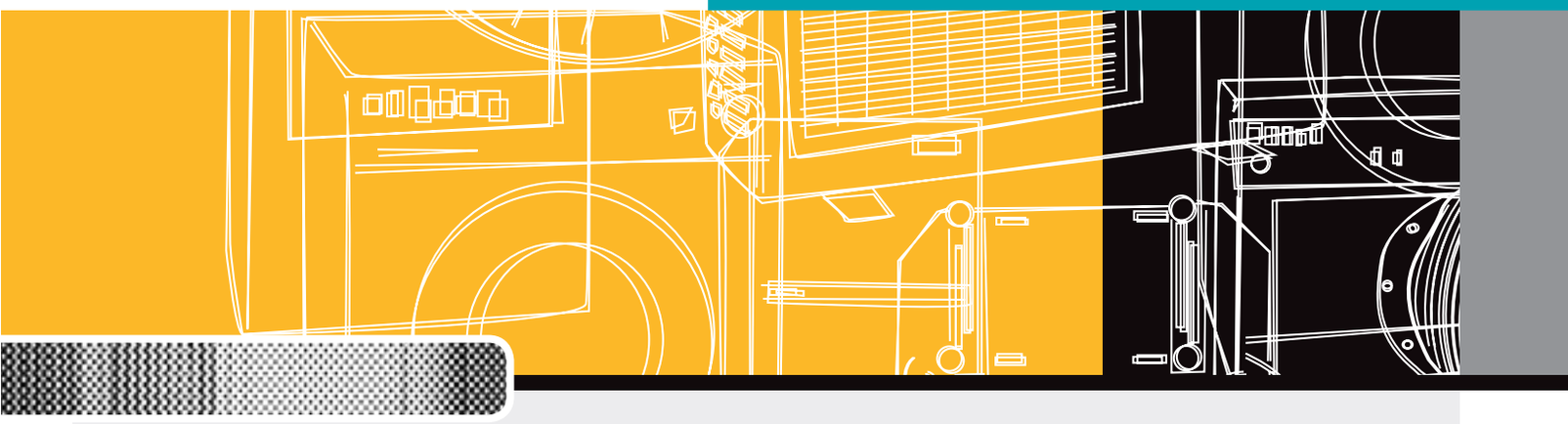
Report No: 2004/02

NATIONAL APPLIANCE AND EQUIPMENT ENERGY EFFICIENCY PROGRAM

ACHIEVEMENTS 2003



AN INITIATIVE OF THE MINISTERIAL COUNCIL
ON ENERGY FORMING PART OF THE
NATIONAL GREENHOUSE STRATEGY

ACHIEVEMENTS 2003

Achievements 2003 is the annual report of the National Appliance and Equipment Energy Efficiency Program (NAEEEP). It reports on the progress made in this calendar year against the goals set for the program by the Ministerial Council on Energy over the triennium 2002-2004. The Workplan can be accessed on the web site: www.energyrating.gov.au/library/details200201-workplan.html .

This is the fourth such annual report about the program. The program commenced in 1992 and was substantially upgraded in 1998.

MINISTERIAL COUNCIL ON ENERGY MEMBERSHIP LIST as at March 2004

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March 2004

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BACKGROUND

THE NATIONAL APPLIANCE AND EQUIPMENT ENERGY EFFICIENCY PROGRAM (NAEEEP)

The National Appliance and Equipment Energy Efficiency Program is a collection of coordinated end-use energy efficiency programs that deliver economic and environmental benefits to the community. It focuses on programs that require a nationally consistent framework to improve energy efficiency and reduce greenhouse emissions from household appliances and equipment and commercial and industrial equipment.

The main tools used in NAEEEP are mandatory minimum energy performance standards (MEPS), energy efficiency labelling enforced by law and voluntary measures including endorsement labelling, training and support to promote the best available products. A more complete description of the tools used in the program is available at www.energyrating.gov.au.

THE NATIONAL APPLIANCE AND EQUIPMENT ENERGY EFFICIENCY COMMITTEE (NAEEEC)

The National Appliance and Equipment Energy Efficiency Committee, consisting of officials from Commonwealth, State and Territory government agencies and representatives from New Zealand, is responsible for managing NAEEEP. The Committee reports to other government structures and is ultimately directed by the Ministerial Council on Energy (MCE) (consisting of the Energy Ministers from all jurisdictions).

The NAEEEC Charter provides the terms of reference for the committee and is available at www.energyrating.gov.au/naeeec.html. The member organisations of the committee are listed in Annexure 3, at the end of this report.

COST EFFECTIVE ABATEMENT

Australian Governments have decided that the energy efficiency of appliances and equipment must improve at rates well beyond what the market has traditionally been able to deliver. This market intervention program has proved to be an extremely cost-effective mechanism for reducing energy demand and greenhouse gases produced by consumer appliances and commercial and industrial equipment.

Experts estimate that the greenhouse abatement being achieved by NAEEEP costs minus $30/tonne of carbon dioxide avoided (in other words, over time consumers actually save money buying the more efficient products as well as reducing greenhouse gas emissions). Experts also suggest that the additional cost to consumers when purchasing the more efficienct appliances required by the program will be recouped, on average, within one to two years in the form of savings on energy costs. Overall, it is estimated that the program will save purchasers over $4 billion by 2018.

The fact that NAEEEP is achieving abatement at a net negative cost suggests that there is a case for much stronger action in this area. This idea will be explored in the next triennial work plan for NAEEEP.

A CHANGING WORLD

Last year NAEEEC reported that, under the auspices of the Ministerial Council on Energy, preliminary work had commenced on the development of a National Framework for Energy Efficiency. In November 2003 a Discussion Paper, *Towards a National Framework for Energy Efficiency – Issues and Challenges,* was released. This paper can be accessed at the web site: www.seav.vic.gov.au/news/nfee.html.

The aim of the National Framework for Energy Efficiency is to address emergent issues and challenges related to energy efficiency and to unlock the significant potential economic, social and environmental benefits of increased investment in this area. The discussion paper made the following points:

- There is a significant gap between economically viable levels of energy efficiency and what is actually being delivered by the market;
- Up to 9000 jobs would be created by accelerating investment in energy efficiency;
- The National Appliance and Equipment Energy Efficiency Program demonstrates the benefits gained from a nationally coordinated approach;
- A range of barriers contribute to the low market uptake of cost-effective energy efficiency opportunities;
- Building a self-sustaining energy efficiency industry is a key challenge; and
- The inertia of current practice needs to be overcome.

Input from stakeholders has been obtained, but Governments are still to consider the recommendations that have come out of the process. Governments' responses are expected by mid 2004 and, as NAEEEP continues to enjoy strong financial and bi-partisan political support, these responses are likely to have an important impact on the program.

PROGRAM BREAK-DOWN

The program increasingly covers the household, commercial and industrial sectors. By 2018, NAEEEP energy savings are projected to come from the following areas: measures targeting major household appliances 25%, standby power 24%, lighting 12%, electricity distribution transformers 10%, air conditioners 9%, commercial refrigeration 8%, water heaters 7% and electric motors 5%.

STANDARDS AUSTRALIA – ALSO PARTNERS

Each year NAEEEC acknowledges the crucial contribution of stakeholders outside of government agencies in creating effective standards for Australia. While recognising that it is not possible to give recognition to all those who participate in and assist the program each year, NAEEEC identifies persons whose special role or sterling service is instrumental in achieving energy conservation and greenhouse abatement.

This year NAEEEC would like to give special recognition to the staff at Standards Australia and especially those involved in servicing the electrical product committees. Under the management of Warren Miller, Committee Secretaries like Colin Doyle, Nat Krishnan and Boris Krastev have assisted government, industry and consumer representatives to resolve effective standards in a form suitable for regulatory action.

The role of Committee Secretary, balancing the interests and personalities of various stakeholder groups, is possibly overlooked or under-valued by some. In NAEEEP, the production of standards is crucial to the effective operation of efficiency laws. These hardworking Standards Committee Secretaries have delivered in this challenging environment.

NAEEEC would like to express its appreciation for the contribution of time and effort made by all those stakeholders involved in the program during this year.

STANDARDS AUSTRALIA

MAJOR ACHIEVEMENTS

In 2003, the focus of NAEEEC's work was implementing the national Standby Power Strategy, as well as analysis and standards development work on air conditioners, distribution transformers and commercial refrigerators that will result in MEPS being introduced or upgraded in 2004.

The focus of NAEEEC's work during 2003 was primarily in the following areas:

- Implementation of the National Standby Power Strategy.
- Analysis and standards development work on air conditioners, linear fluorescent lamps, distribution transformers and commercial refrigerators that will result in MEPS being introduced or upgraded in 2004.
- Introduction of MEPS for fluorescent lighting ballasts.
- Improvement in coordination of activities with the New Zealand program to minimise the adverse impacts of different standards.
- Development of the Top Energy Saver Award Winner (TESAW), ready for launch in 2004.
- Work on the establishment of a mandatory national gas appliance efficiency scheme modelled on NAEEEP.

Further detail on NAEEEC's work in these areas is provided in the following sections.

IMPLEMENTING THE STANDBY POWER STATEGY

Many modern appliances consume power all day, every day, even when not in use. This 'standby power' can make a substantial contribution to an appliance's overall energy consumption and is often required to maintain a convenient 'ready' state for instant, on demand use. However, in some cases, standby power serves no useful function or operates at excessive levels for the background task being performed.

In November 2002, the Ministerial Council on Energy released Australia's Standby Strategy 2002 - 2012 - *Money Isn't All You're Saving*. During 2003, the key activities undertaken to implement this strategy were:

- Australia and New Zealand published AS/NZS62301 (int) 2003, Household Electrical Appliances – Measurement of Standby Power. They were the first countries to publish a national standard on standby power.
- Australia maintained its strong engagement with other economies, particularly the US, Europe and Korea during the year. Australia recognises that international cooperation is paramount to the success of standby power reduction.
- A Standby Power Forum was held in October 2003, and 10 product-specific plans to address excessive standby power were published and distributed to stakeholders for comment.
- The 2003 Standby Power Store Survey was undertaken to track trends in the standby power consumption of a range of product types.

Annexure 1 provides a detailed overview of how the national Standby Power Strategy was put into action during 2003.

TOP ENERGY SAVER AWARD WINNER (TESAW)

The Top Energy Saver Award Winner is a new voluntary labelling system created to recognise and endorse the most energy efficient appliances available on the market. It applies to both electric and gas products that already carry the mandatory "star rating" energy label. The label makes it easier for consumers to identify the most energy efficient products on the market, empowering consumers to make environmentally sustainable choices.

The eligibility criteria for TESAW will be updated annually, and suppliers with eligible products will be able to use the award logo to promote their energy efficient products once they are registered for energy labelling and they have signed a code of conduct for use of the logo.

While the mandatory star rating label enables a consumer to readily compare the efficiency of models on the showroom floor, the implied message of "look for a 5 or 6 star product" is no longer accurate, as the labels were rescaled in 2000 to provide scope for the more efficient products anticipated in the next few years. There are categories where the most efficient appliances now only gain 4 or 4.5 stars (out of the possible 6 available) causing some consumers to mistakenly believe that better appliances are available elsewhere.

The *Top Energy Saver Award Winner* concept, which has been market tested, overcomes this issue by providing an easy way for consumers to identify which models are the most energy efficient on the marketplace. The scheme will be officially launched in March 2004, having operated as a trial from the end of 2003. Annexure 2 provides a list of all products that received the award in 2003.

NEW MEPS AND LABELLING

During 2003, MEPS and labelling requirements commenced for ballasts used with linear florescent lamps. The full list of products now subject to the mandatory requirements is provided in the following table.

Product	Minimum Standard	Mandatory label
Household		
Refrigerators	Yes	Yes
Freezers	Yes	Yes
Clothes washers		Yes
Clothes dryers		Yes
Dishwashers		Yes
Airconditioners		Yes
Electric water heaters	Yes	
Commercial and Industrial		
Electric motors	Yes	
Three phase airconditioners	Yes	
Ballasts for linear florescent lamps	Yes	Yes

STRATEGY TO INCLUDE GAS APPLIANCES IN A MANDATORY NATIONAL SCHEME

During 2003, plans to improve the effectiveness of the industry-run MEPS and labelling scheme for domestic gas appliances gathered momentum. Meetings between industry and government representatives have mapped an Action Plan that could be considered by the Ministerial Council on Energy.

A discussion paper, *Driving Energy Efficiency Improvements to Domestic Gas Appliances*, was published by the Sustainable Energy Authority of Victoria on behalf of a working group comprising industry and government representatives, and was released for public comment in July 2003.

Consultation workshops were conducted in Melbourne, Sydney and Adelaide, with the comment period closing in November 2003.

The proposed development of a national Gas Appliance and Equipment Energy Efficiency Program (GAEEEP), modelled on NAEEEP was strongly supported by most Australian stakeholders. Importantly, both the Gas Appliance Manufacturer's Association of Australia (GAMAA) – which represents the majority of manufacturers and suppliers of domestic gas water heaters and heaters – and the Gas Technical Regulators Committee support the transition to a new national regulatory scheme, underpinned by a nationally consistent legislative framework.

Preliminary modelling indicates the development of a GAEEEP has the potential to generate significant economic and environmental benefits:

- Australian residential gas consumption in 2023 could be around 5.3% lower than business as usual (BAU);
- Expenditure on natural gas by residential consumers could be as much as $115 million per annum below BAU by 2023; and
- Annual greenhouse gas emissions could be as much as 600kt CO_2-e per annum below BAU by 2023.

The next step in 2004 will be to obtain MCE's imprimatur for the development of the GAEEEP.

STRATEGY TO MAINTAIN OUR COMMON MARKET WITH NEW ZEALAND

When New Zealand introduced its national regulatory program in 2002 it determined to set MEPS for two products (electric storage water heaters and lighting ballasts) at different stringency levels to Australia. In both cases the levels set by NZ were more stringent than those in place or proposed for Australia. These differences gave rise to formal processes under the Trans Tasman Mutual Recognition Arrangement (TTMRA), which establishes a common market between both countries as the default position. New Zealand instituted a temporary exemption for these products, thus prohibiting less efficient water heaters and lighting ballasts that satisfied Australian MEPS from being sold in New Zealand. Temporary exemptions continue for 12 months unless extended by agreement.

In respect of lighting ballasts, New Zealand decided to withdraw the temporary exemption from 1 February 2004, allowing Australian sourced products that comply with Australian MEPS levels to be sold lawfully in New Zealand from that date.

In respect of water heaters, New Zealand obtained Australian jurisdictions' agreement to extend the exemption until 1 February 2005, allowing Australian sourced products that comply with Australian MEPS levels to be sold lawfully in New Zealand from that date.

The exemptions for these two products are an exception, rather than the usual approach, as Australian and New Zealand officials have agreed to a Memorandum of Understanding (MOU) to better coordinate both national end-use energy efficiency programs. The MOU provides for co-ordination processes, which will result in closer alignment and cost sharing between the two countries' energy efficiency programs, and for the publication of common work plans from 2005.

CONTINUING ACTIVITIES

ONLINE DATABASE FOR REGISTRATION OF PROCLAIMED PRODUCTS UPGRADED

Through secure access to a website, product suppliers are able to complete electronic application forms for prescribed appliances and equipment and lodge them with one or other of the four registering State regulators or with the New Zealand regulator (under certain conditions). This feature improves administrative processing times for government and saves industry time and money.

The system automatically checks the data as it is input and prompts the need for changes. The system assists industry by providing access to historical records that can be copied and modified as needed, and allows progress of the application to be monitored.

The system commenced in 2002 but was substantially upgraded during 2003, making it even more 'user friendly'. Almost four out of five registrations are now lodged electronically by industry applicants.

Issues of *Appliance Online* are posted on the web site as they become available. The aim of this newsletter is to provide further assistance to on-line users. Upgraded user manuals are also regularly posted on the web site.


appliances online

Issue 2 February 2004

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Welcome

This is the second appliance online newsletter designed to keep on line users of the registration facility abreast of the latest developments. The on-line facility has now been successfully operating for more than 18 months, in that time nearly 250 users have signed on to use the site. Almost 80% of all applications for energy labelling or MEPS are now done electronically, indicating a high level of acceptance of the system.

We shall continue to develop and improve the site and welcome suggestions for improvement from all users. If you have a problem with the system or would simply like to offer a suggestion for improvement please contact Robert Foster (System Administrator) on 03 99 266333 or email to rafoster@energyefficient.com.au

What's New

Since the last newsletter in December 2002 several new features have been added, you may not be familiar with some of these. Following is a brief summary of the main new features:

Major System Upgrade – November 2003

In November 2003 a major upgrade was carried out on the system. Most users will now have used the new system but for those who haven't here is a summary the major new features:

- The ability for users to alter their user name and password details.
- The ability for users to add new brands to their custom list at any time
- A new opening page (home page) that does away with the need to initiate brand and appliance types. All brands and appliance types are now permanently available to the user from the home page.
- An improved search function is now incorporated into the opening (home) page.

Those wanting further details on these new functions should refer to the latest user manual which is downloadable from your homepage.

Expiring Status

All records have a status, for example records awaiting submission have a "hold" status, records that have been submitted and have been accepted have an "approved" status. This record status can be viewed on the listings available on your home page (third column from the left). Recently a new status has been added, this status is called "expiring". Expiring records are current registrations that are within 100 days of reaching their expiry date. Expiring records will be displayed whenever the search field for status is set to "in progress" (this is the default setting) or if the "Expiring" status is specially selected when conducting a search.

Each time you open your database we suggest that you check to see if any of your records are about to expire.

ADMINISTRATIVE GUIDELINES

The mandatory aspects of the NAEEEP are underpinned by State and Territory legislation. The use of a nationally endorsed "model regulation" allows jurisdictions to create a nationally consistent scheme. The scheme operates through a set of mutual expectations. Industry expects that regulatory agencies will act in a nationally consistent and cooperative way and will embrace the Standards Australia processes in setting and publishing the technical requirements. Regulatory agencies expect that industry will participate constructively to ensure that technical requirements are fair and equitable for all participants.

The Guidelines play a crucial role in demonstrating compliance with these expectations. They act as a reference to assist State and Territory regulatory agencies to work in a consistent manner so that costs and inconvenience to industry are minimised and regulations concerning energy efficiency labelling and performance standards are enforced efficiently. The Guidelines provide an explanation to industry about:

1. The way State and Territory legislation operates and the intention for administration by State and Territory regulatory agencies;
2. The standard procedures, rules and processes that are intended to underpin State and Territory legislation;
3. The responsibilities of relevant State and Territory regulatory agencies; and
4. The responsibilities of industry.

The Guidelines have operated since 1 April 2000, and to ensure their continued relevance, were reviewed during 2003, with the latest version placed on the Energy Rating website, www.energyratiung.gov.au/admin-guidelines.html, in October 2003.

REGULATORY ACTIVITIES

Mandatory Minimum Energy Performance Standards (MEPS) have a dramatic impact upon the energy efficiency of household appliances and industrial and commercial equipment. These improvements are the cornerstone of the program and represent government intervention in the market to drive efficiency improvements faster than if the marketplace was left to its own devices.

To keep the community informed, and to help maintain the pace and quantum of these improvements over time, NAEEEP periodically releases information about its targeted products in detailed plans and in more general position papers. In May 2003, NAEEEC released *When You Can Measure It, You Know Something About It* (Projected Impacts 2000-2020), which revealed that the program will save the community over $4 billion over the next 15 years.

FLUORESCENT LAMP BALLASTS

As reported last year, the Ministerial Council on Energy endorsed the consensus proposal for MEPS to apply to fluorescent lamp ballasts. These became effective from 1 March 2003. The following table outlines the costs and benefits of MEPS for fluorescent lamp ballasts. Expert modelling suggests the Australian market will be transformed with lower efficiency ballasts disappearing to be replaced by more efficienct ballasts that comply with MEPS.

REGULATORY PROCESSING

During 2003, regulatory impact statements for new or revised MEPS were released for air conditioners (NAEEEC report 2003/08), small electric water heaters (NAEEEC report 2003/09), linear fluorescent lamps (NAEEEC report 2003/10) and three phase electric motors (NAEEEC report 2003/11). Copies of these reports are available on www.energyrating.gov.au Extracts of the key findings for the introduction of MEPS for air conditioners and distribution transformers, commencing in October 2004 are outlined below.

Air Conditioners

The RIS for air conditioner MEPS was released in August 2003 as NAEEEC report 2003/08 (copy is available for download from www.energyrating.gov.au in the electronic library). The proposal is that MEPS be introduced in October 2004 for single phase refrigerated air conditioners and revised MEPS for three phase (original MEPS introduced in 2001) and single phase units that fall within the scope of the joint Australian New Zealand Standard AS/NZS 3823 in October 2007. The scope covers refrigerated air conditioners with a cooling capacity of up to 65kW that may be configured for cooling only or have a reverse cycle capability to provide both cooling and heating.

BENEFITS AND COSTS OF MEPS FOR FLUORESCENT LAMP BALLASTS – CUMULATIVE IN 2010

Net Present Value of Costs	Net Present Value of Benefits	Net Benefits	Benefits/Costs	CO^2-e Saving (Mt)
($M) 31	($M) 300	($M) 269	9.8	0.35

Notes: (NPV 2003-2010, 10% discount rate)

ESTIMATED COSTS AND BENEFITS TO USERS OF MEPS FOR AIR CONDITIONERS (PRESENT VALUES, $M)

	Residential			Three-phase		
Discount Rate	0%	5%	10%	0%	5%	10%
Total Benefits	187	102	59	535	261	138
Total Costs	51	34	22	34	25	20
Design & Testing Costs	-7	-7	-7	5	5	5
Manufacturing Costs	58	41	30	29	21	15
Net Present Value	137	69	37	501	235	118
Benefit/Cost Ratio	3.7	3.0	2.6	15.7	10.3	7.0

Electricity Distribution Transformers

The RIS for distribution transformer MEPS was released in February 2003 as NAEEEC report 2002/18 (copy is available for download from www.energyrating.gov.au in the electronic library). The proposal is to introduce MEPS for all electricity distribution transformers from 10kVA up to 2500 kVA capacity and which operate on 11kV or 22kV networks, falling within the scope of Australian Standard AS2374.1.2 2001. The Standard containing the final MEPS levels was published on 3 March 2003.

PROJECTED NATIONAL COSTS AND BENEFITS OF MEPS FOR TRANSFORMERS

No MEPS			With MEPS			NPV Extra Cost	NPV Saving	Benefit/ Cost Ratio
NPV cost of trans	NPV losses	Total NPV	NPV cost of trans	NPV losses	Total NPV			
$1,750.8	$3,412	$6,514	$2,093	$2,915	$5,006	$343	$497	1.4

Note: $M NPV of transformer costs from 2002-30, 10% discount rate

ENFORCEMENT

COURT ACTION

Western Australian regulators took legal action against two stores for breaches of the Electricity Act 1945 in that some electrical products on sale in their stores did not display energy rating labels. Harvey Norman Electrical in Geraldton received a $8000 fine with $1000 costs, while Rick Hart Discounts in Karrinyup was fined $3,000 with $457.70 in costs.

INFRINGEMENT NOTICES

Victorian and Queensland regulators, who have been piloting infringement notice powers in their States, issued some 20 notices to electrical store retailers. Some retailers received more than one infringement notice, each of which represents a fine of $500.

REFERRAL TO THE ACCC

Last year's report gave progress on the referral in July 2002 of alleged misleading energy efficiency claims associated with the promotion and supply of the Chinese manufactured Haier brand clothes washers to the Australian Competition and Consumer Commission (ACCC).

As foreshadowed in last year's report, in April 2003 the ACCC accepted court enforceable undertakings from both Retravison Pty Ltd and Haier Australia Pty Ltd, which provided for full refunds to consumers who had bought the washing machines associated with the alleged false energy rating claims. In addition the ACCC requested Haier Electrical Australia Pty Ltd to have all whitegoods distributed by it to be tested at a testing laboratory accredited by the National Association of Testing Authorities Australia or its equivalent. Details can be found in the press release on the ACCC website www.accc.gov.au

CHECK TESTING PROGRAM

During the 2003 calendar year, some eight individual check tests were conducted on units identified as 'at risk' of failing MEPS or labelling standards by compliant competitors or market intelligence.

In all eight check tests, the suppliers' claimed performance was not supported by testing conducted at NATA accredited laboratories. State regulators subsequently de-registered one of these products, one product was found to be unregistered and is currently under investigation by the Queensland regulator, one product was de-registered early in 2004 (to be reported on in Achievements 2004) and action remains pending for the remaining five units. In addition, two other products check tested in 2002 that had not had action completed by the end of 2002 were subsequently de-registered in 2003.

DE-REGISTRATIONS 2003

Product Type	Brand	Model	Deregistration Date
Freezer	Liebherr	GSND3316	21/1/2003*
Refrigerator	Lemair	RQ-150C/HR-166R	12/02/2003
Clothes Washer	Haier	XQJ50-31A	1/11/2002*
Air Conditioner	LG	LST 244T-2	16/1/2004

* De-registration effected on 7 May 2003 but backdated to the noted date.

In the past, NAEEEC has conducted substantially more check tests. The low number reflects the emphasis in 2003 on capacity building within accredited facilities to test to the regulatory standards but also reflects the increasing sophistication of the program in targeting products at real risk of not matching its MEPS or labelling claims.

STANDARDS DEVELOPMENT

COMMERCIAL REFRIGERATORS

MEPS for commercial refrigeration units are scheduled to commence in October 2004. For some years Australian Standards Committee ME/008 has been redeveloping Australian Standard AS1731 for the testing of commercial refrigerators to closely follow the European prEN 441 standard.

NAEEEC and ME/008 identified the need to conduct some development testing on commercial refrigerators. The purpose of the test program was to assist the Standards Committee to refine the test procedure, product groups and to assist government and industry in setting mutually acceptable MEPS and High Efficiency levels.

Tests on a total of 13 units, including open, closed and remote types, were conducted in 2003. These tests included testing in different climate classes and comparative testing using both the Australian standard AS1731 and the US standard ANSI/ASRAE 72-1998. Development and performance analysis of various test pack types which are permitted for use in the Australian standard were also undertaken. Following completion of testing, revisions to the standard were undertaken and the standard was republished in 14 parts on 1 October 2003.

WATER HEATERS

Over the past four years, development work undertaken by NAEEEC in collaboration with various water heater manufacturers has lead to the development of a draft joint Australian and New Zealand standard. This development work included a round robin testing process, where two test units were circulated to two manufacturer laboratories as well as a second independent test laboratory (Mechlab), for comparative testing. Based upon the results from this extensive standards development test program, 11 recommendations for improvements to the test method were made to the Standards Committee in April 2003. The Committee accepted all recommendations and agreed to incorporate the amendments into a public comment draft standard expected to be released in 2004.

LIGHTING BALLASTS

A standards development program was conducted in 2002 to ensure the test method for ballast efficiency (AS/NZS4783.1) could be practically applied in a test laboratory and to review the requirements for ballast MEPS in the draft Part 2 standard. The Part 2 standard was published in late 2002 in readiness for the introduction of MEPS in March 2003.

Subsequent to the introduction of MEPS, NAEEEC commissioned a second independent test laboratory (Lighting Sciences Australia) to conduct a series of comparative round robin tests on ten of the test units used in the initial development program. These tests were completed in December 2003 with a report expected later in 2004.

CLOTHES WASHERS

NAEEEC consultants have undertaken substantial work to improve the test methodology and harmonise it with international test methods. NAEEEC has co-ordinated the ongoing testing requirements to determine the suitability of, and appropriate normalisation curves for, each new swatch batch that has been made available for sale in Australia. These tests are commissioned through Test Research in Sydney and made available to the Standards Committee.

Repeatability issues associated with one batch of swatches has led to the initiation of a long-term study to determine the effect of ageing on the washability of swatches. Swatch calibration data is placed on www.energyrating.com.au under Australian Standards. This is updated when each new batch is added to the approved list.

Standards Australia is also seeking to develop a reliable test method for measuring the rinse performance of washing machines. Such an indicator is needed so existing voluntary and any future mandatory water efficiency rating schemes can be based on pertinent, accurate and reproducible test results.

Existing measures used for measuring rinse performance have all fallen into disuse because of doubts about their accuracy. An alternative method, that depends on the measurement of residual surfactant in the aqueous liquor held in the wet load on completion of the program, is now being developed.

Initial tests were completed in June 2003 and a report was presented to the Standards Committee working group meeting in October 2003. The initial test results were encouraging and a second more comprehensive round of tests commenced in February 2004.
This work is being funded by the Department of Environment and Heritage as part of the prospective water efficiency labelling scheme.

CLOTHES DRYERS

In 2003, four Australian laboratories agreed to participate in an International Electrotechnical Commission clothes dryer round robin test to determine the reproducibility of methods to prepare clothes loads for testing. All tests were completed by October 2003 and results were forwarded to the IEC. The tests demonstrated that load preparation methods provided adequate levels of reproducibility.

COMMUNICATIONS

WEB SITES

In 2002 there were around 220,000 hits on the program's various websites. By 2003 the number of hits increased to 523,000, representing 80,000 visits by individual inquirers. These website hits generated nearly 676 individual email enquiries for the Australian Greenhouse Office (AGO) to respond to on behalf of NAEEEC.

Mid year the program rationalised its web addresses to improve communication with stakeholders. The website www.energyrating.gov.au then became the principal portal for those interested in the program.

ANNUAL STAKEHOLDERS' FORUM

On 25 March 2003, NAEEEC held its sixth annual stakeholders forum in Melbourne. This forum is one of the most important ways NAEEEC communicates with industry and other stakeholders about topical issues and provides key stakeholders with access to government officials managing the program.

In 2003, almost 150 participants attended the Energy Efficiency Forum, including regulated-industry representatives, regulators, Commonwealth and State government officers, representatives from testing laboratories and energy efficiency consultants.

The Forum program and summary, publications distributed to attendees and plenary session presentations are all available from www.energyrating.gov.au /forums.html

SWITCHED ON AND APPLIANCES ONLINE ELECTRONIC NEWS SHEETS

Switched On is the communication bulletin of the program, of which three issues were released during 2003. This four to six page newsletter, available electronically, records topical issues of interest to stakeholders. The newsletter is available from www.energyrating.gov.au/switchedon.html

The *Appliances Online* newsletter is a recent initiative designed to keep users of the online registration facility abreast of the latest developments. As well as being a source of the latest information in this area, the publication provides advice of a more technical nature to the more than 80% of applicants for energy labelling or MEPS who now use the online system.

Anyone interested in being advised by email of these publications should contact john.primrose@deh.gov.au

PUBLICATIONS RELEASED DURING 2003

Copies of the following publications are available on www.energyrating.gov.au from the NAEEEC electronic library.

No or date of publication	Title
2003-01	Achievements - 2002.
2003-02	When You Can Measure It, You Know Something About It - Projected Impacts 2000-2020
2003-03	A Study of Home Entertainment Equipment Operational Energy Use Issues.
2003-04	Appliance Standby Power Consumption Store Survey 2003.
2003-05	Greening Whitegoods - 2001.
2003-06	Standards Development - 2002.
2003-07	A Study of Office Equipment Operational Energy Use Issues.
2003-08	Minimum Energy Performance Standards for Airconditioners, Regulatory Impact Statement.
2003-09	Revised Minimum Energy Performance Standards and Alternative Strategies for Small Electric Storage Water Heaters.
2003-10	Minimum Energy Performance Standards for Linear Fluorescent Lamps: Regulatory Impact Statement.
2003-11	Revised Minimum Energy Performance Standards for Electric Motors: Regulatory Impact Statement.
SB2003-01	Standby Product Profile DVD.
SB2003-02	Standby Product Profile - Photocopiers.
SB2003-03	Standby Product Profile - Computer Printers.
SB2003-04	Standby Product Profile - Microwave Ovens.
SB2003-05	Standby Product Profile - Scanners & Multifuntion Device.
SB2003-06	Standby Product Profile Portable Stereos.
SB2003-07	Standby Product Profile - VCRs
SB2003-08	Standby Product Profile - Clothes Washers
SB2003-09	Standby Product Profile - Clothes Dryers
SB2003-10	Standby Product Profile - Dishwashers

BUDGET

The national program operates with contributions from all Australian jurisdictions. The funding formulae sources 50% from the Commonwealth, with the other 50% from all States and Territories. In addition to agency staff resources, NAEEEC received funding from MCE in the financial years 2002/03 of $1.24 million and in 2003/04 of $1.45 million, a welcome increase of 17%. This additional funding will allow for a greater focus to be placed on compliance in the 2003/04 financial year.

This national scheme, which in the past ten years has managed more than $8 million of program funds, delivers the most cost-effective abatement of any program operated by Australian governments.

ANNEXURE 1 - NATIONAL STANDBY STRATEGY 2002-2012

MCE's Standby Strategy is the culmination of extensive stakeholder consultation that included the release of a discussion paper and an open forum to discuss the proposals face-to-face. 2003 was an opportunity to put the plan into action.

A key element of the Strategy is the identification of possible problem products and action plans to achieve the 1 Watt target through the development and release of 'Product Profiles'. The Profiles provide background information, proposed measures Government will employ, and a date for review.

Each Product Profile was open to comment for a period of three months. The above Profiles have been accepted, pending some minor resolutions pertaining to whitegoods. It is expected this matter will be resolved in early 2004.

There has been wide industry support for the Profiles. Feedback from the Consumer Electronics Suppliers Association included "…the Product Profile process sets out a straightforward, consistent plan for industry to follow". Further Profiles will be released in 2004.

The Strategy, all Profiles, presentations and associated publications can be found on the Energy rating Website: www.energyrating.gov.au/standby.html.

The table below outlines the Product Profiles released at public forums in 2003.

Product	Standard (AS/NZS)	Sector	Interim Target	Review Year	Final Target – 2012
DVD player / recorder	62301(Int):2003	Residential	4 W	2007	1 W
VCRs	62301(Int):2003	Residential	4 W	2007	1 W
Portable stereos	62301(Int):2003	Residential	4 W	2007	1 W
Microwave ovens	62301(Int):2003	Residential	4 W	2008	1 W
Dishwashers	2007.2 :2003	Residential	4 W	2008	1 W
Clothes washers	2040.2:2000	Residential	4 W	2008	1 W
Clothes dryers	2442.2:2000	Residential	4 W	2008	1 W
Printers		Residential / Commercial	66% comply with 2003 Energy Star levels, or 25% comply with 2006 Energy Star criteria	2008	1 W
Photocopiers		Residential / Commercial	75% comply with 2003 Energy Star levels, or 25% comply with 2006 Energy Star criteria	2008	1 W
Scanners & MFDs		Residential / Commercial	75% comply with 2003 Energy Star levels, or MFDs only - 25% comply with 2006 Energy Star criteria	2008	1 W

ANNEXURE 2 - TESAW WINNERS 2003

Clothes Dryers - TESAW.			
Brand	Model	Load (kg)	Star Rating
MIELE	WT945	2.5	

Clothes Washers - TESAW.			
Brand	Model	Load (kg)	Star Rating
MIELE	MIELE W 310	5.5	
MIELE	W1986	6.5	
LG	WD-1023FB	7.5	
LG	WD-1223FB	7.5	
MIELE	W1926	6	
MIELE	W487	5.5	

Dishwashers - TESAW.			
Brand	Model	Place Settings	Star Rating
MIELE	MIELE G 896 SCi PLUS	14	
MIELE	MIELE G 898 SCi PLUS	14	
LG	LD-14AT2, LD-4050W, LD-14AW2	14	
LG	LD-14AW2, LD-4050W, LD-14AT2	14	
LG	LD-4050W, LD-14AW2, LD-14AT2	14	
DISHLEX	DX302 & DX403, DX302WB, DX302SB, DX403WB, DX403IWB, DX403SB	12	
MIELE	G898 SCi PLUS-3, G896 SCi PLUS-3	14	
MIELE	G896 SCi PLUS-3, G898 SCi PLUS-3	14	

Refrigerater/Freezers - TESAW.			
Brand	Model	Total Volume (litres)	Star Rating
VESTFROST	SE255	247	
VESTFROST	SE325	323	
VESTFROST	BSKF 352	293	

Air-conditioners - TESAW.					
Brand	Model	Cooling		Heating	
		Output (kW)	Star Rating	Output (kW)	Star Rating
FUJITSU	AWT14LSAZ/AOT14LSAWC	4.00	6	6.00	6
PANASONIC	CS-C9CKP/CU-C9CKP5	2.70	5		
LG	LST182H-2	5.12	5	5.30	5½
DAIKIN	FTXD50B***/RXD50B***	5.20	5	6.50	5
DAIKIN	FTKD50B***/RKD50B***	5.20	5		
DAIKIN	Super Inverter Ducted FDYP100D*** / RZP100D***	9.80	5	12.10	5
PANASONIC	CS-C7CKP/CU-C7CKP5	2.05	5		
DAIKIN	FLX50A***/RXD50B***	4.70	5	6.10	4½
DAIKIN	FLK50A***/RKD50B***	4.70	5		
SANYO	SAP-KCRV243GJ	6.60	4½		
SANYO	SAP-KCV94GJ	2.60	4½		
SANYO	SAP-KCV94GJH	2.60	4½	3.90	4
SANYO	SAP-KCV124GJH	3.65	4	4.30	4
PANASONIC	CS-C28BKP5/CU-C28BKP5	8.20	4		
SANYO	SAP-KCV124GJ	3.65	4		
DAIKIN	FVXS35B*** / RXS35B***	3.50	4	4.50	5
DAIKIN	Daikin Inverter FTXS50B*** + RXS50B***	5.00	4	5.80	4½
DAIKIN	FTKS50B***/RKS50B***	5.00	4		
PANASONIC	CS-E15CKP/CU-E15CKP5	4.40	4	5.30	4½
PANASONIC	CS-C18BKP/CU-C18BKP5	5.30	4		
DAIKIN	FTXD60B***/RXD60B***	6.20	4	7.20	4½
DAIKIN	FTKD60B***/RKD60B***	6.20	4		
HYUNDAI	HSH-073BE	2.05	4	2.14	4½
WINIA	WSH-073BE	2.05	4	2.14	4½
PANASONIC	CS-A18BKP/CU-A18BKP5	5.30	4	5.75	5½
PANASONIC	CS-A12CTP/CU-A12CTP5	3.52	4	4.00	5
DAIKIN	Super Inverter Ducted FDYP125D*** / RZP125D***	12.50	4	14.90	4½
DAIKIN	FLX60A***/RXD60B***	5.70	5½	6.70	4½
DAIKIN	Daikin Inverter FTXS60B*** + RXS60B***	6.00	5½	7.00	4
ACCENT AIR	AA13	12.18	5½	12.29	4

ANNEXURE 3 - NAEEEC MEMBER ORGANISATIONS

The Commonwealth, New Zealand, and each State and Territory are represented on NAEEEC and participate in its deliberations. Representatives are officials within Government departments, agencies and statutory authorities or persons appointed to represent those bodies. Representatives are usually a senior officer directly responsible for energy efficiency. The membership is currently under review and may expand to include other agencies working in these fields.

The *Australian Greenhouse Office (AGO)* is the lead Commonwealth agency for greenhouse matters. The AGO is responsible for monitoring the National Greenhouse Strategy in a cooperative effort with States and Territories and with the input of local Government, industry and the community. An AGO officer is the chair of NAEEEC and others provide support for its activities.

The NSW *Ministry of Energy and Utilities* (incorporated within the Department of Energy, Utilities and Sustainability since 1 January 2004) provides policy advice to the NSW Government and operates a regulatory framework aimed at facilitating environmentally responsible appliance and equipment energy use. The Ministry is represented on the Energy Efficiency and Greenhouse working group, through which the appliance and equipment related elements of the National Greenhouse Strategy are being progressed.

The NSW *Sustainable Energy Development Authority* was established in February 1996 with a mission to reduce the level of greenhouse emissions in New South Wales by investing in the commercialisation and use of sustainable energy technologies.

The *Office of the Chief Electrical Inspector* is the Victorian technical regulator responsible for electrical safety and equipment efficiency. Its mission is to ensure the safety of electricity supply and use throughout the State. The corporate vision of the Office is to demonstrate national leadership in electrical safety matters and to improve the superior electrical safety record in Victoria. The Office's strategic focus is to ensure a high level of compliance is sustained by industry with equipment efficiency labelling and associated regulations.

The Sustainable Energy Authority was established in 2000 by the Victorian Government to provide a focus for sustainable energy in Victoria. The Authority's objective is to accelerate progress towards a sustainable energy future by bringing together the best available knowledge and expertise to stimulate innovation and provide Victorians with greater choice in how they can take action to significantly improve energy sustainability.

The *Electrical Safety Office, Department of Industrial Relations*, is the Queensland technical regulator responsible for electrical safety and appliance and equipment energy efficiency. The office ensures compliance with electrical safety and efficiency regulations throughout Queensland.

The *Environmental Protection Agency*, through its Sustainable Industries Division, is Queensland's lead agency in the promotion of energy efficiency, renewable power, and other initiatives that reduce greenhouse gas emissions throughout the State. The key aim of the unit is to achieve increased investment in sustainable energy systems, technology and practice.

Energy Safety WA seeks to promote conditions that enable the energy needs of the Western Australian Community to be met safely, efficiently and economically.

The Western Australian *Sustainable Energy Development Office* promotes more efficient energy use and increased use of renewable energy to help reduce greenhouse gas emissions and increase jobs in related industries.

The *Office of the Technical Regulator* seeks to ensure the coordinated development and implementation of policies and regulatory responsibilities for the safe, efficient and responsible provision and use of energy for the benefit of the South Australian community.

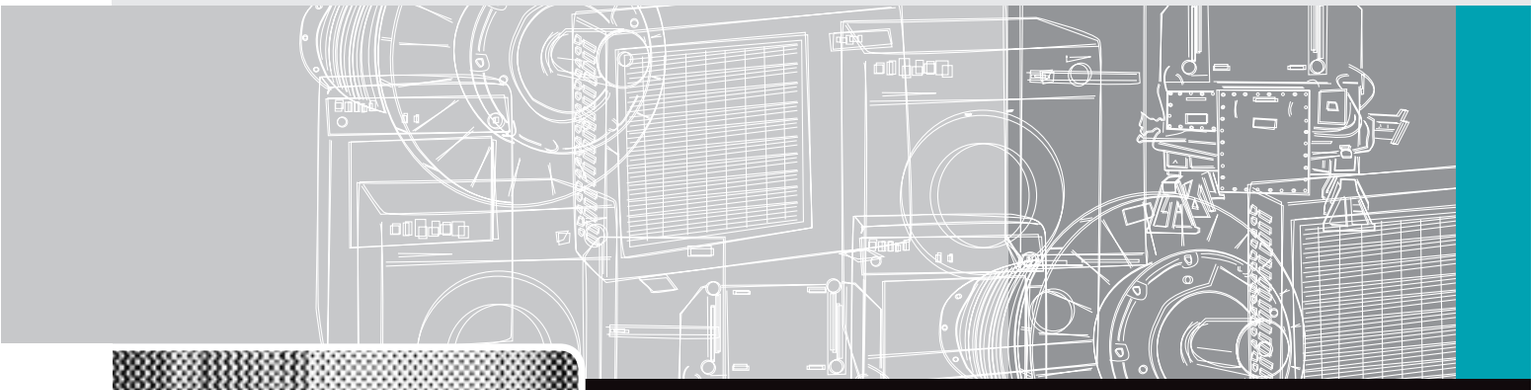
The Tasmanian Government's interest is managed by the *Department of Infrastructure, Energy and Resources' Office of Energy, Planning and Conservation* (OEPC). The OPEC provides policy advice on energy related matters including energy efficiency. Its web site is www.dier.tas.gov.au/energy/indext.html.

Electricity standards and Safety is the technical regulator responsible for electrical safety throughout Tasmania. Regulatory responsibilities include electrical licensing, appliance approval and equipment energy efficiency.

The Australian Capital Territory's interest is managed by the *Energy and Water Reform Branch, Industry Policy and Regulation Branch, Department of Treasury.*

The *Department of Employment, Education and Training* is responsible for the administration of regulations in the Northern Territory regarding various aspects of safety, performance and licensing for goods and services including electrical appliances.

The *Energy Efficiency and Conservation Authority (EECA)* is the principal body responsible for delivering New Zealand's National Energy Efficiency and Conservation Strategy. EECA's function is to encourage, promote and support energy efficiency, energy conservation and the use of renewable energy sources.



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or any member organisation working
on the National Appliance and Equipment
Energy Efficiency Program.