

ADMINISTRATIVE GUIDELINES

FOR

THE APPLIANCE AND EQUIPMENT ENERGY EFFICIENCY PROGRAM

OF

**MANDATORY LABELLING AND MINIMUM ENERGY PERFORMANCE
STANDARDS**

TABLE OF CONTENTS

Please note that these Guidelines and the Attachments to these Guidelines are not intended to affect any rights that any person may have in relation to administrative review processes in relevant Australian State and Territory jurisdictions.

1.	APPLICATION AND COVERAGE ISSUES	4
1.1	Parties to the national legislative scheme and these Guidelines	4
1.2	Nature of these Guidelines	4
1.3	Purpose and Objective of these Guidelines	5
1.4	Application of these Guidelines.....	6
1.5	Review of these Guidelines	8
1.6	Review of the NAEEEC program.....	8
2.	STANDARDS ISSUES	9
2.1	Standards contain technical detail	9
2.2	Regulators' role on Standards' Committees	9
2.3	Transition between Standards.....	9
2.4	International Standards	10
2.5	Memorandum of Understanding with Standards Australia.....	10
3.	INDUSTRY REGULATION ISSUES	11
3.1	Industry Regulation will meet Council of Australian Government Guidelines	11
3.2	Matters relating to the introduction of mandatory minimum energy performance standards (MEPS). 11	
3.3	Matters relating to the introduction of mandatory energy labelling	12
4.	ADMINISTRATION ARRANGEMENTS ADOPTED BY REGULATORY AGENCIES	14
4.1	Registration processing.....	14
4.2	Maintenance of a public register.....	14
4.3	Duration of registration	15
4.4	Consultation/Coordination between regulatory agencies	16
4.5	Withdrawal of approval to conduct registration testing.....	16
4.6	Compliance monitoring through laboratory check testing.....	17
4.7	Selection of models for check testing.....	17
4.8	Description of the check testing process.....	17
4.9	Description of procedures for dealing with non-compliance.....	17
4.10	Public reporting on check testing program outcomes.....	18
4.11	Validity Criteria-Energy Consumption and Performance.....	18
4.12	Reliance on Third Party Test Reports.....	18
4.13	Requests from the public to use the Energy Rating Label graphic	18
5.	ATTACHMENTS TO THE APPLIANCE & EQUIPMENT ADMINISTRATIVE GUIDELINE .	20
	<i>Attachment 1 – National Appliance & Equipment Energy Efficiency Committee Contact Details</i>	<i>21</i>
	<i>Attachment 2 – History of the Development of Australian Energy Labelling and Minimum Performance Standards.....</i>	<i>22</i>
	<i>Attachment 3 – Registration of Similar Models - Families.....</i>	<i>27</i>
	<i>Attachment 4 – Check Testing Flow Chart</i>	<i>29</i>

Attachment 5 – Check Testing Product Selection Criteria 30
Attachment 6 – Check Testing – Description of the Process 33
Attachment 7 – Description of Procedures Relating to Non-Compliance 35
Attachment 8 – Validity Criteria – Energy Consumption & Performance 36
Attachment 9 – States’ & Territories’ Legislation and Subordinate Regulations..... 42
Attachment 10 – Interpretations & Dispensations..... 43
Attachment 11 - Application to Reproduce Energy Rating Label Imagery..... 44

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MANDATORY LABELLING AND MINIMUM ENERGY PERFORMANCE
STANDARDS

ADMINISTRATIVE GUIDELINES
AGREED BY ALL AUSTRALIAN REGULATORS
Edition 5 – June 2005

1. APPLICATION AND COVERAGE ISSUES

1.1 Parties to the national legislative scheme and these Guidelines

The Ministerial Council on Energy (MCE), which comprises all Ministers¹ with responsibility for energy, is responsible for the development of the appliance and equipment energy labelling and minimum energy performance standard (MEPS) programs. Its committee, the Energy Efficiency Working Group (EEWG), is responsible for the development of the concept of Administrative Guidelines for use by each relevant State and Territory in the administration of State and Territory legislation covering energy efficiency labelling and performance standards.

The National Appliance and Equipment Energy Efficiency Committee (NAEEEC) is charged with the ongoing management of these Guidelines. NAEEEC reports to both MCE and EEWG.

NAEEEC comprises the State and Territory regulatory agencies that are responsible for administering State and Territory legislation concerning energy efficiency labelling and performance standards in each State and Territory in Australia, together with New Zealand officials. Attachment 1 to these Guidelines sets out contact details for NAEEEC. State and Territory regulatory agencies should be contacted in relation to queries concerning the legislation that those agencies administer.

1.2 Nature of these Guidelines

Stakeholders should understand that all governments in Australia and New Zealand have adopted a uniform policy position to facilitate a nationally consistent legislative and administrative scheme. The national scheme comprises three elements:

1. The legislation and subordinate regulations of the States and Territories, herein referred to as "State and Territory legislation" (legislation and regulations listed in Attachment 9);
2. The Australian Standards published by Standards Australia which are incorporated by reference into the State and Territory legislation and which contain the detail of the minimum energy performance and labelling requirements; and
3. These Guidelines which are used in conjunction with the above elements.

¹ Energy Ministers from New Zealand and Papua New Guinea have observer status on MCE.

While the State and Territory legislation is administered by the relevant State or Territory regulatory agency, it is important to reiterate that the legislative scheme is of a national character and is intended to be administered in a uniform and consistent manner. Equally, it must be noted that while these Guidelines are intended to provide guidance in relation to the administration of the national legislative scheme, where there is conflict or inconsistency between State and Territory legislation and these Guidelines, the legislation will prevail to the extent of any such conflict or inconsistency.

The national legislative scheme is reliant upon State and Territory legislation to give it legal effect. Relevant State and Territory legislation is based on a nationally endorsed “model regulation”. The application of a national legislative scheme within a federal system of government presents challenges for both regulatory agencies and industry. 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. Within this context, these Guidelines strive to produce consistent outcomes for all affected products irrespective of the product or jurisdictional location.

These Guidelines are not intended to act as an exhaustive explanation of the legislative and administrative scheme. For example, the objectives and policies of State and Territory regulatory agencies and the internal and administrative processes of those agencies will remain relevant to the administration of the relevant State and Territory legislation.

1.3 Purpose and Objective of these Guidelines

The purpose of these Guidelines is to explain how the national legislative scheme for energy labelling and minimum energy performance standards ("the national legislative scheme") are intended to be administered by relevant State and Territory regulatory agencies. These Guidelines are also intended to act as a guide to relevant State and Territory regulatory agencies to facilitate uniform and consistent practice among State and Territory regulatory agencies. These Guidelines are not a legally binding instrument intended to impose legal obligations upon relevant State and Territory regulatory agencies.

Similarly, the goal of these Guidelines is to ensure that State and Territory regulatory agencies work in a consistent manner in an attempt to minimise costs and inconvenience to industry while enforcing legislation concerning energy efficiency labelling and performance standards. The Guidelines are also intended to explain to stakeholders:

1. how the State and Territory legislation operates and is intended to be administered by State and Territory Regulatory agencies;
2. how standard procedures, rules and processes are intended to underpin State and Territory legislation;
3. the responsibilities of relevant State and Territory regulatory agencies; and
4. the responsibilities of industry.

1.4 Application of these Guidelines

These Guidelines relate to two forms of mandatory requirements set out in relevant State and Territory legislation:

1. mandatory energy labelling; and
2. mandatory minimum energy performance standards (MEPS).

The following two tables set out the current and future domestic appliance and equipment types that are subject to these mandatory requirements:

Table 1a: Application of Energy Efficiency Labelling and MEPS to Appliances and Equipment as at May 2005

Domestic Electric Appliance Type	Mandatory Labelling	Mandatory MEPS
Air Conditioners (3 phase)	No *	Yes
Air conditioners (single phase)	Yes *	Yes
Clothes dryers	Yes	No
Clothes washers	Yes	No
Dishwashers	Yes	No
Electric Motors (3 phase)	No	Yes
Fluorescent Lighting Ballasts	No **	Yes
Mains pressure storage hot water heaters	No	Yes
Refrigerators and freezers	Yes	Yes
Linear fluorescent lamps	No	Yes
Commercial refrigeration	No	Yes
Distribution transformers	No	Yes

Note: Some standards have requirements and specifications regarding claims of “high efficiency”.

Note *: Three phase models, some single phase commercial models and ducted types are exempt from mandatory energy labelling but may be labelled on a voluntary basis. See AS/NZS 3823.2-2003 for details.

Note **: Fluorescent lamp ballasts within the scope of MEPS must be marked with their energy efficiency index according to AS/NZS 4783.2-2002.

**Table 1b Future Application of MEPS and Labelling to equipment
Scheduled introduction – as of May 2005**

Electric Equipment Type	Mandatory Labelling	New Mandatory MEPS	Revised Mandatory MEPS
Refrigerators and freezers	Yes *		1 Jan 2005
Electric mains pressure storage hot water heaters (< 80L)	No		1 Oct 2005
Electric vented displacement storage hot water heaters	No	1 Oct 2005	
Electric heat exchange water heaters	No	1 Oct 2005	
Electric motors (3 phase)	No		1 Apr 2006
Air conditioners (single phase)	Yes *		2006/2008 **
Air conditioners (three phase)	No *		2007
Close control air conditioners	No	2006	2009
External power supplies	No ***	1 Apr 2006	
Televisions	No	2006	
Set top boxes	No	2006	
Home entertainment equipment	No	2006	
Boiling and chilled water dispensers	No	2007	
Chillers	No	2007	
Computers and monitors	No	2007	
Icemakers and storage bins	No	2007	
Refrigerated beverage vending machines	No	2007	
Compact fluorescent lamps	No	2007	
Extra low voltage halogen lamp transformers	No	2007	

Notes:

* Energy Labelling algorithms are due to be changed in 2006/7.

** Revised edition of AS/NZS3823.2-2005 will contain precise details of coverage and dates. Some single phase units will have changes in MEPS levels in 2007.

*** Marking of the relevant efficiency class is required.

Note that some of these products are subject to high efficiency labelling and minimum efficiency levels for claims of high efficiency.

Preliminary work is being undertaken on other products. Information about this work can be found on the program web site: www.energyrating.gov.au. The current three year work program and the annual Achievements report provide further information.

1.5 Review of these Guidelines

These Guidelines have operated since 1 April 2000. Whenever the relevant State and Territory legislation or the Australian Standards are amended, these Guidelines are reviewed and, where necessary, amended to ensure consistency with the amended legislation or Australian Standard. Any review of the Guidelines is conducted in close consultation with stakeholder groups. Comments on or questions about these guidelines can be directed at any time to the NAEEEC secretariat at energy.rating@greenhouse.gov.au

The latest version of these Guidelines can be found at:
<http://www.energyrating.gov.au/admin-guidelines.html>

Edition 5 was released in May 2005. The main changes in this edition were:

- Updates of equipment regulatory schedules
- Information on the memorandum of understanding between AGO and Standards Australia.
- An outline of the new registration duration system agreed by NAEEEC in April 2005 and to be implemented for new registrations.
- Addition of information on unit selection for check testing.
- Updates of contacts and general information.
- Clarification of validity criteria for refrigerators and freezers in Attachment 8.
- Detailed schedule of current registration expiry and review dates.

1.6 Review of the NAEEEC program

The NAEEEP holds a consultation forum in March or April each year. This forum is an ideal opportunity for stakeholders to discuss any concerns they may have in relation to the Guidelines. Additional fora are held on an ad hoc basis to cover new products or programs. Details of upcoming events and fora can be found on www.energyrating.gov.au under NAEEEC events.

In addition, from time to time, NAEEEC also publishes forward plans foreshadowing the direction of its future work. A copy of the present plan, *Joint work plan and policies for the triennium 2005–06 to 2007–08*, (NAEEEC Report 2005/01) is available from www.energyrating.gov.au in the electronic library. Other work plans for specific programs, for example lighting and gas products, are also released from time to time. Each year NAEEEC release an annual report of its activities called *Achievements*, copies of which is also available from www.energyrating.gov.au in the electronic library. These are also available from the NAEEEC secretariat – see contact details in Attachment 1.

The history of the development of the current mandatory energy efficiency labelling and MEPS program is contained in Attachment 2. It explains the way in which the various elements of the national legislative scheme developed and now combine to create a legally enforceable energy efficiency labelling and MEPS program.

2. STANDARDS ISSUES

2.1 Standards contain technical detail

State and Territory regulatory agencies acknowledge the vital role played by the relevant Australian Standards ("the Standards") published by Standards Australia International. Industry and other stakeholders are confident that the process for developing Standards has the capacity to deliver technically robust Australian and New Zealand Standards. State and Territory regulatory agencies intend to continue to use the Standards as the means of specifying the necessary technical information (such as precise descriptions of testing methods, minimum energy performance levels and labelling requirements) on which the national legislative scheme is based. Attachment 2 also details the interaction between the Standard and relevant State and Territory legislation.

A listing of the latest version of each applicable standard can be found in the product summary section of the energy rating website at www.energyrating.gov.au/updates.html

Generally, Part 1 of the Standards specifies test methods and Part 2 is a special regulatory standard which specifies energy labelling and/or MEPS requirements. However, the actual part number of the test method and this special regulatory standard may vary between products. The Standards can be purchased through Standards Australia, www.standards.com.au

2.2 Regulators' role on Standards' Committees

Representatives from State and Territory regulatory agencies (and their representatives) maintain membership on the appropriate Standards committees and sub-committees to:

- ensure that the outcomes are fair to both Australian manufacturers and importers; and
- balance the interests of industry with those of consumers and the community within the context of the environmental objectives of the participating governments.

Governments retain the right to collectively reject any amendment or revision to a Standard which is inconsistent with their agreed policy. Regulatory standards that contain the requirements for MEPS and energy labelling are published by Standards Australia on behalf of NAEEEC. These standards must be approved for publication by NAEEEC who have the right of veto over such publication.

2.3 Transition between Standards

Standards are periodically amended and the effective date of implementation is specified in the published document. When an amendment to a Standard is published, the existing and amended Standards may operate concurrently during a "transition period", subject to appropriate amendments to State and Territory legislation being introduced. NAEEEC will consult with industry representatives and other stakeholders to determine a fair transition period.

State and Territory regulatory agencies and stakeholders have agreed that this type of transition arrangement minimises the cost of compliance and the confusion surrounding both the old and the new standards.

2.4 International Standards

State and Territory regulatory agencies support a policy of adopting international standards and contributing to international standards development wherever appropriate. This support is intended to minimise the prospect of Australian Standards becoming unintended trade barriers and to reduce business compliance costs in meeting differing standards in differing markets for the same appliance. State and Territory regulatory agencies also recognise that local climatic, competition and usage characteristics must be considered in the development of Australian Standards. NAEEEC and Standards Australia actively support participation in relevant international standards committees.

2.5 Memorandum of Understanding with Standards Australia

In early 2005, The Australian Greenhouse Office of the Department of the Environment and Heritage (on behalf of the National Appliance and Equipment Energy Efficiency Committee) signed a memorandum of understanding on the development and publication of Australian Standards which are used to regulated energy efficiency (many of which are joint standards with New Zealand). It is essential to the operation of the nationally consistent regulatory framework that regulators have confidence that relevant product standards are under the control of government agencies and, therefore, the creation of such standards are subject to a vote of unanimous approval by the regulatory agencies before they are authorised and published by Standards Australia as Australian Standards. AGO and Standards Australia desire to ensure clarity in the developmental roles of Australian Standards for energy efficiency, in particular regarding the approval process for New Work Items to be used in connection with the NAEEEP on the terms of this MOU. The MOU is an expression of intent of the parties in relation to the improvement of the approval process for standards in connection with appliance and equipment energy efficiency.

The parties agreed that, where a consensus on a standard cannot be reached between the non-NAEEEC Relevant Standards Committee representatives and AGO after exercising reasonable endeavours, the parties agree to resolve the impasse by either:

- (i) Standards Australia agreeing to authorise and publish the relevant standard (despite there not being consensus support for the standard from non-NAEEEC Relevant Standards Committee representatives) and provided that all NAEEEC members approve the Draft Product Standard; or
- (ii) Standards Australia notifying AGO that, due to lack of support from non-NAEEEC Relevant Standards Committee representatives, it is not willing to authorise and publish the relevant standard.

If Standards Australia notifies AGO in accordance with article (ii) above, Standards Australia will use its best endeavours to assist AGO in formulating an alternative solution, including without limitation, considering authorising and publishing the relevant standard under a miscellaneous product category which can be used for regulatory purposes, if reasonably required and provided that all NAEEEC members approve.

3. INDUSTRY REGULATION ISSUES

3.1 Industry Regulation will meet Council of Australian Government Guidelines

In accordance with the requirements of the Council of Australian Governments, any amendment or revision to an Australian Standard which potentially involves a significant impact on industry or consumers can only be introduced after the prescribed Regulatory Impact Statement (RIS) processes have been satisfactorily completed.

For example, labelling algorithms and associated label format issues are to be reviewed at regular intervals. Any significant modification to a labelling algorithm or label format proposed during a review will not be implemented until RIS processes have been satisfactorily completed. RIS processes include the production of a cost benefit analysis which demonstrates that the proposed industry regulation will benefit the community-at-large, as well as the conduct of an adequate consultation process which offers interested parties the opportunity to communicate their views. RISs that have been prepared for NAEEEEC and released for public comment are available from www.energyrating.gov.au from the electronic library.

Relevant RIS processes are explained at the Commonwealth Office of Regulation Review site www.pc.gov.au

3.2 Matters relating to the introduction of mandatory minimum energy performance standards (MEPS)

3.2.1 Date and scope of application

Minimum energy performance standards (MEPS) for chosen types of domestic appliances or commercial and industrial equipment come into effect in Australia on specified dates. All chosen appliances or equipment manufactured in or imported into Australia after that date must meet the relevant MEPS requirements. The relevant Australian Standard provides the detail of MEPS requirements.

As an example, MEPS for refrigerators and freezers came into effect in Australia from 1 October 1999. All refrigerators and freezers manufactured in or imported into Australia after 1 October 1999 had to meet the MEPS requirements in AS/NZS 4474.2-1997.

3.2.2 Transition arrangements for stocks of non-MEPS complying appliances or equipment

Stocks of non-complying products that were imported or manufactured in Australia prior to the effective date of legislation affecting them can be sold for an indefinite period (i.e. products made in Australia or imported prior to the relevant MEPS date may be sold at any time into the future). These “grandfathering” provisions are significantly less onerous on retailers than the previous requirement to clear stocks from the retail system within 1 year. Manufacturers and importers should be aware that, to provide suitable transition arrangements under state legislation, state regulators will each have their own approach.

Where a product is already covered by registration requirements (e.g. energy labelling or MEPS), in some cases states may cancel or grandfather registrations for products that do not comply with new MEPS requirements on the MEPS implementation date. However, products covered by such a registration that were manufactured in Australia or imported before the MEPS implementation date may still be legally sold. See section 4.3 of these guidelines for new rules regarding the duration of registrations for products that do not meet forthcoming changes in requirements such as MEPS and performance levels.

Where a product is not regulated for energy efficiency prior to the implementation of MEPS for the first time, products that were manufactured in Australia or imported before the MEPS implementation date may be sold without the need for any registration.

Products that are manufactured in Australia or imported after the MEPS implementation date must hold a valid registration at the time of sale which indicates compliance with the relevant MEPS requirements.

3.3 Matters relating to the introduction of mandatory energy labelling

3.3.1 Date and scope of application

New products added to the program – relevance of date of manufacture or importation

With the introduction of a mandatory energy label for a new appliance or equipment type, energy efficiency regulators will work with industry to agree two dates and focus compliance attention on stock displayed to customers in showrooms (where the label influences purchases) as distinct from stock not displayed but supplied direct from storage facilities after the sale:

1. a date where the proposed mandatory label may appear on any showroom stock on a voluntary basis (ie before the mandatory scheme comes into effect)
2. a compliance date after which all showroom stock must carry the appropriate version of the mandatory label

After the compliance date, all units of the specific appliance or equipment type displayed in showrooms must display the mandatory label or be subject to state and territory legal and administrative sanctions. Sanctions will also apply if showroom stock displays no label after the compliance date even if the products were manufactured in or imported into Australia before the compliance date. In these circumstances, the appropriate star label may need to be attached immediately before units are displayed in retail stores.

All units manufactured or imported before the mandatory label compliance date may continue be lawfully sold at anytime; they just cannot be used as display stock without a mandatory label. Regulators may assist by creating a special form of the label (a 0 star rating) for use on display stock falling into this category.

With the revision of an existing mandatory energy labelling (ie in circumstances where the mandatory label algorithm is "improved"), energy efficiency regulators will specify three dates and continue to make a distinction in law between stock displayed to customers in showrooms and stock sold, but not so displayed, to consumers:

1. a date before which the revised mandatory label may not appear on any showroom stock (ie the original label only is permitted).
2. a period of time during which either the original label or the revised label may appear on showroom stock
3. a compliance date after which all showroom stock must carry the revised label (ie the original label is treated in law as unlabelled product)

All units of the specific appliances or equipment manufactured in or imported into Australia displayed in showrooms must display, after the final compliance date, the revised label or be subject to state and territory legal and administrative sanctions. Sanctions may also apply if showroom stock displays no label or the original mandatory label after the compliance date.

Products with original mandatory labels may be lawfully sold at anytime; they just cannot be used as display stock after the agreed transition period.

Changes affecting an existing product in the program

With the maturity of the program, it is now becoming common for labelling requirements to be changed in respect of products already in the program. As an example, revised energy labelling Standards for all labelled appliances came into effect in Australia from 1 April 2000. For the six month period between 1 April 2000 and 30 September 2000, it was lawful for suppliers to display appliances with labels that meet the requirements of either the superseded or the revised Standard.

In respect of the example just mentioned, State and Territory regulatory agencies worked with suppliers and retailers to accomplish the change over of display stock on retail showroom floors during the period 1 July 2000 to 30 September 2000. All appliances on display in retail showrooms were required to be labelled in accordance with the revised Standards from 1 October 2000. The revised Standard for each appliance detailed these labelling requirements.

3.3.2 Transitional arrangements for stocks of appliances or equipment labelled in accordance with a superseded Standard

To allow existing Australian stocks to be cleared following the introduction of new energy labelling requirements for a product already in the program, regulators allow products carrying non-complying labels to continue to be sold provided that they are supplied direct from warehouse stock and are not displayed in showrooms.

State and Territory regulatory agencies are prepared to hold discussions with suppliers and retailers who have genuine difficulties in complying with this transitional provision.

4. ADMINISTRATION ARRANGEMENTS ADOPTED BY REGULATORY AGENCIES

4.1 Registration processing

All products that are subject to the relevant legislative requirements described in these Guidelines must be registered before being offered for sale. A product can be registered in New South Wales, Victoria, Queensland or South Australia. All States and Territories accept any valid registration approved in another State.

State and Territory regulatory agencies have set target time periods within which they aim to process the applications they receive. If an application is incomplete and/or incorrect, the applicant may, at the discretion of the relevant regulatory agencies be notified so that the application can be amended by the applicant. However, it must be noted that it is the responsibility of the applicant to provide complete and correct applications.

To make the registration process easier, from 1 June 2002 the State Regulators have combined their registers of prescribed products and are providing an electronic registration facility. The website is interactive and in addition to providing the registration facility, it allows companies to review their current, past and pending registrations. If you would like to make use of this facility you will need to register for secure access to the site. You will then be issued with a user name and access code. Application for a user name and password and logging on the on-line registration system can be done at the following web site (note that www is not required):

<http://reg.energyrating.gov.au>

Attachment 3 to these Guidelines provides information on the registration of related models.

4.2 Maintenance of a public register

The data that is to be provided by an applicant in the form "Application for Registration" (in either its hardcopy or electronic form), is data that is specified in the relevant Standard or, in the case of water heaters, in the legislation. This data is placed on a public register. At their April 2002 meeting, the regulatory authorities in Australia that are responsible for energy labelling and MEPS agreed to shift registrations for prescribed appliances onto a single national web based database. The public may access this data on the internet or directly from the relevant regulatory agency.

Data that is contained in or can be derived from a test report accompanying an application may be commercially sensitive. The public register excludes all test report based data not provided in an "Application for Registration". It should be noted, however, that a member of the public can make a request for a test report under the freedom of information legislation of a State or Territory. Ultimately, access to test report data is a question for determination under the relevant freedom of information legislation. It is possible, given that test report data may be commercially sensitive, that such information would fall within one or more of the exemptions set out in the various Freedom of Information Acts. A list of which fields are considered to be in the public domain is included on the www.energyrating.gov.au in the interactive product listings.

A public register for all registered products currently on the market is available at www.energyrating.gov.au. This database is updated daily providing an accurate list of registered appliances and equipment. State and Territory regulatory agencies routinely disseminate extracts from the public register in brochures or through other means such as the internet. Register data for non-current models may be supplied by regulatory agencies on request.

At the time of registration, manufacturers and importers are asked to enter a date from which the product is available on the market. This date is used to control the appearance of registered products onto the energy labelling website listings for www.energyrating.gov.au to make sure that products which are registered well ahead of their availability do not generate consumer inquiries before they are generally available on the market. This function does not affect the validity of the product registration.

Similarly, manufacturers have at all times the option of entering an “off market” date for each registration record for which they are the registered user. An “off market” date prior to the current date means that the record is not listed on the energy labelling website www.energyrating.gov.au. This function does not affect the validity of the product registration.

A full listing of all currently registered products (with no filtering by “on market” or “off market” dates) is available in the full CSV (Excel) download files which are on www.energyrating.gov.au

4.3 Duration of registration

State and Territory legislation provides that a product registration remains in force for up to 5 years from the date it was granted. Where a registered item has a set expiry date, a State or Territory regulatory agency may notify the registration holders of an imminent registration expiry. However, there is no legal obligation on the regulatory agencies to provide such notice, and it remains the sole responsibility of the registration holders to ensure that a registration remains current.

If the registration holder wishes to continue the registration of a product, then a new application form, along with a copy of the label (for those products which require labelling) and the application fee payable must be provided to the relevant State or Territory regulatory agency prior to the expiry of the registration. Under certain circumstances, to be determined by each individual State and territory, the requirement for a fee may be waived or rebated.

Special arrangements may be introduced during transition periods for new energy labels, performance requirements or where new MEPS levels are introduced. Registration holders need to be aware of any relevant conditions that may affect their registrations.

As of 1 April 2005 a new nationally consistent registration expiry system is being introduced. The system will operate as follows:

Irrespective of the date of registration all registered products will have their expiry date set to the second occurrence of 31 March on or after the registration date (eg for a product registered on 1 Feb 2005 the expiry date would be set at 31/03/2006 or if registered on 1 June 2005 expiry

would be 31/03/2007). This rule shall apply unless an earlier date had already been proclaimed for a change of regulation. (eg new MEPS level) in which case that date shall apply.

Each year on 31 March all registrations will have their expiry dates automatically “rolled over” without charge for a further year (eg on 31/03/2005 expiry dates will be rolled over from 31/03/2006 until 31/03/2007). This process continues until either:

- A total of 3 annual rollovers have occurred² in which case no further automatic rollovers will occur and cancellation of the registration will be undertaken on the noted expiry date.
- New regulations (eg new MEPS levels or performance requirements) are scheduled to start before the next roll over date in which case the registrations will be extended only until that date.

It is intended that once a year (1 March) details of the upcoming rollover arrangements for each appliance type shall be notified to industry via the posting of a “Notice of Decision on Registration Expiry Rollover” on the energyrating website (the most current schedule can found on www.energyrating.gov.au under “Making An Application for Labellings and/or MEPS”). This will allow for a minimum 12 months electronic notice on the online database of any impending cancellation.

4.4 Consultation/Coordination between regulatory agencies

State and Territory regulatory agencies may consult with each other about any registration-related matter. Where a change in administrative and operating practice is contemplated in any registering state, the regulatory agency concerned will consult with the other registering States to ensure that the proposed changes will not affect either the consistency with which State and Territory legislation is implemented nationally, or the integrity of these Guidelines. Where a regulatory agency has refused to register a model for energy efficiency labelling or MEPS, it will immediately inform all other States of the circumstances surrounding the refusal.

4.5 Withdrawal of approval to conduct registration testing

If a registration test is found through check testing to be so inaccurate as to result in a product being deregistered, the regulatory agencies may decide not to accept further registration test reports from the laboratory that undertook the registration test. Regulatory agencies will consider any representations from the laboratory involved before taking a final decision not to accept further registration testing from that laboratory. Regulatory agencies may publicise any withdrawal of approval.

Applicants that use laboratories for registration testing whose products subsequently fail check-testing review may be asked to ensure that future testing conducted in relation to their products is undertaken by a NATA accredited laboratory or a laboratory accredited by a body with a mutual recognition agreement with NATA.

Where a test result from a NATA accredited laboratory or a laboratory accredited by a body with a mutual recognition agreement with NATA is in question, NATA will be notified with a view to NATA, or the body with whom NATA has a mutual recognition agreement, reviewing the data

² This provides for a maximum registration period of between 4 and 5 years depending upon date of registration

in question or, where necessary, its accreditation of the laboratory. Regulatory agencies may publicise any withdrawal of accreditation by NATA or associated accreditation bodies that results from a review of the laboratory by an accreditation body.

4.6 Compliance monitoring through laboratory check testing

Regulatory authorities will commission NATA accredited laboratories (not associated with the registration holder) to check test selected models to ensure that the energy label and/or performance claims made by suppliers are valid. Check testing is undertaken for all product types subject to mandatory energy labelling and/or MEPS requirements. Attachment 4 to these Guidelines is a flowchart describing the check testing process.

All State and Territory regulatory agencies participate in the National Check testing program conducted under the auspices of NAEEEEC and the Energy Efficiency Working Group. This program, which involves a two-stage approach to check testing, is evaluated regularly.

4.7 Selection of models for check testing

Models to be check tested are not selected on a random or statistical basis but rather on the basis of a series of factors that are considered to increase the risk of failure. In addition, regulatory agencies will consider complaints by third parties and will take action if the complaint includes a test report conducted by a NATA accredited laboratory that demonstrates a compliance failure in a product. The selection criteria for check testing are explained in Attachment 5.

For some product types, the energy efficiency of the product may be affected to some extent by the age of the product, particularly those that use blown foams for insulation. The age of the new product will not be considered for Stage 1 screening check tests. However, if the Stage 1 check fails, consideration will be given to the age of the additional new products selected for Stage 2 tests.

4.8 Description of the check testing process

State and Territory regulatory agencies have agreed to adopt a common approach to check testing, using a two staged screening process. Attachment 6 describes the check testing process that is intended to be followed by regulatory agencies in a consistent manner.

4.9 Description of procedures for dealing with non-compliance

Attachment 7 describes the procedures that State and Territory regulatory agencies will adopt when check testing establishes that a product fails to meet a mandatory requirement of the relevant Australian Standard.

Regulatory agencies monitor compliance with State and Territory legislation in retail stores. In accordance with the Attachments to these Guidelines and relevant State and Territory legislation, legal or administrative action may be taken against a supplier of a product that does not comply with a mandatory legislative requirement.

4.10 Public reporting on check testing program outcomes

All State and Territory regulatory agencies, as well as the other members of NAEEEC (e.g. the Australian Greenhouse Office, the Sustainable Energy Authority Victoria) will be informed of the identity of product suppliers and retailers whose products fail the check testing program. These agencies and/or the relevant Ministers may publicly report on check testing program outcomes.

4.11 Validity Criteria-Energy Consumption and Performance

Check testing is an essential part of the energy efficiency labelling program and has the aim of verifying that the performance of products on the market meet suppliers' energy efficiency and performance claims, as well as the claims contained in original energy labelling applications. The check testing process is the major quality assurance procedure for the energy efficiency labelling scheme. Accordingly, there is a need to define check testing validity criteria for performance standards, as well as for energy labelling.

Attachment 8 contains a validity verification process drawn from the recommendations of a statistical consultancy commissioned during 1999 and updated in 2004. A copy of the statistical paper is available from <http://www.energyrating.gov.au/admin-guidelines.html>

4.12 Reliance on Third Party Test Reports

For any application, a facility exists whereby an applicant can elect to rely on a test report submitted in an earlier application (provided the products are technically identical and the source registration number is quoted).

If an applicant wishes to rely on the test report previously submitted by an unrelated third party, then regulators will require that either;

- The applicant provide their own copy of the test report which they would have to source from the third party whose supply of such documentation would be deemed to imply consent for its use, or
- The applicant sign a declaration that consent for use of the original test report has been granted by the third party, or
- The applicant provides a declaration from the third party stating that they authorize the applicant to use their test report.

4.13 Requests from the public to use the Energy Rating Label graphic

In the interests of continuing to promote awareness and recognition of the Energy Rating label, whilst protecting its credibility, the following guidelines are intended to form the basis of assessments of applications to use the label so as to ensure this process occurs in an objective and consistent fashion.

Individuals or organisations wishing to use the Energy Rating label image should complete and return the application provided in Attachment 11 to these Guidelines, together with any supporting material, to the address shown thereon. In order for the application to be approved, these materials should satisfy NAEEEC that each of the following requirements is met.

1. The proposed usage will not mislead members of the general public into believing the product, service or entity involved has government or NAEEEC sponsorship, endorsement, certification or approval, or is affiliated with NAEEEC or associated government agencies. (Generally, the more closely related the subject matter of an application to the type of product regulated under NAEEEP, the more likely the usage could be misleading or confusing).
2. The proposed usage is not in association with a product, service or entity that conflicts, or could potentially conflict, with the objectives of NAEEEP in promoting energy efficient appliances and equipment, or with which it would be inappropriate for NAEEEC or government agencies to be associated.
3. The proposed usage is not likely to bring the Energy Rating label, NAEEEP, NAEEEC or another government body into disrepute as assessed by the general public or the target audience of the proposal.
4. The proposed usage is not likely to result in significant private gain at the expense of the label. (Generally, the further away from private sector or individual benefit and the closer to educational or public good promotional campaigns, the more likely the usage will be approved).

While the above points are intended to provide a guide as to when permission to use an image of the Energy Rating label or likeness thereof might be granted, the final decision remains at NAEEEC's discretion, taking into account the particular circumstances of any request.

In the interests of consistent decision-making, NAEEEC will maintain a register of instances in which the label has been used (or approval sought) and the outcome of the Committee's assessment of that usage.

The following is a course of action to be employed in the event the Energy Rating label image is used without NAEEEC's prior approval:

1. The individual or organisation responsible will be contacted by a NAEEEC representative and informed of the above policy. That body will be invited to supply details to allow NAEEEC to properly assess the matter.
2. In the event NAEEEC rejects the use, a reasonable time will be allowed for the organisation to correct the position. The amount of time given will be at NAEEEC's discretion, but will take into account factors such as the medium used and the impact the misuse has on the label and upon the public.
3. In the event that the organisation refuses to withdraw its use of the label, NAEEEC may take legal action to protect the label image and/or may publicly declare its position.

**5. ATTACHMENTS TO THE APPLIANCE & EQUIPMENT ADMINISTRATIVE
GUIDELINE**

**Attachment 1 – National Appliance & Equipment Energy Efficiency Committee Contact
Details**

as at 1 July 2005

Mr Shane Holt (Chair)
Director
Equipment and Appliances Team
Australian Greenhouse Office
The Department of the Environment and Heritage
GPO Box 787
CANBERRA ACT 2601

Phone: (02) 6274 1888

Secretary
Equipment Appliances and Transport Team
Australian Greenhouse Office
The Department of the Environment and Heritage
GPO Box 787
CANBERRA ACT 2601

John Gorton Building Annex
Administrative Place
PARKES ACT 2600

Fax: (02) 6274 1814
E-mail: energy.rating@greenhouse.gov.au

Contact details for relevant state and New Zealand members of NAEEEEC can be supplied on request.

Attachment 2 – History of the Development of Australian Energy Labelling and Minimum Performance Standards

Energy labelling for major appliances in Australia was first proposed in the late 1970s by the State governments of New South Wales (NSW) and Victoria. When the Commonwealth government first raised this issue with the appliance industry in 1982, there was considerable resistance, on the grounds that any program should be nationally uniform rather than risk differing State approaches, and that a program should be voluntary rather than mandatory.

After three years of negotiation, government and industry could not agree on a mutually satisfactory voluntary labelling program. In late 1985, the NSW and Victorian state governments announced that those States would bi-laterally make energy labelling mandatory. Energy labelling for refrigerators and freezers became mandatory in 1986. In 1987 and 1988, room air conditioners and dishwashers were included in the legislative scheme. Victoria labelled clothes dryers in 1989 and clothes washers in 1990. In 1991, South Australia introduced labelling requirements for all five major appliances types.

The remaining States and Territories now have energy labelling regulations in force, giving formal nationwide backing to a program which has effectively been in place for fifteen years. Major manufacturers and importers now recognise the commercial value of energy labelling, and are generally very supportive of the program. However, extending the program to new appliance groups will require cost benefit analysis and processes to foster industry support.

Initial Regulatory Structure

Energy labelling was made mandatory in Australia by virtue of State and Territory legislation and subordinate regulations ("State and Territory legislation") which incorporated relevant Australian Standards. State and Territory legislation also specified the requirements for energy labels for appliances and equipment, and set out offences and penalties for non-compliance with legislative requirements.

While this approach worked, it had a great potential for problems. A lot of technical material had been incorporated into the legislation and regulations. For example, regarding the layout of energy labels and algorithms to calculate energy efficiency, as there are eight States and Territories, and five appliance types required to be labelled (ie potentially 40 sets of different requirements), differences in requirements between States and Territories could result from minor differences in the drafting of the relevant legislation at the State and Territory level. Where technical changes to the program were planned, amending so many regulations in a uniform manner was a daunting task. The cost to Australian industry and consumers of having multiple forms of regulations could be substantial.

Structure for MEPS and Energy Labelling Laws

The introduction of Minimum Energy Performance Standards (MEPS) for refrigerators in Australia prompted a rethink of the labelling system and the subsequent development of a new approach to energy efficiency labelling regulation. This reconsideration coincided with the revitalisation of energy efficiency labelling program that had been operating since 1991.

The new approach separated the Standard's requirements into two distinct parts. "Part 1" of the Australian Standards relates to the test procedure (test method, ambient conditions, performance measures, test materials). "Part 2" is a special regulatory standard which has been created to contain the detailed technical requirements for energy labelling and MEPS (where applicable). Depending on the particular product, the test procedure and regulatory standard Part numbers may not necessarily be Parts 1 & 2 respectively. "Part 2" of the Standards, while drafted by the relevant standards committee (to ensure that there is a seamless interface with "Part 1" of the Standards), is under the effective joint control of the relevant State and Territory regulatory agencies whose approval is required prior to a Standard's publication.

"Part 2" of the Standard includes data on how to calculate star ratings and the comparative energy consumption (CEC - the energy number that appears on the label) for each appliance, details on the number of units to be tested, minimum performance requirements, application forms, check testing procedures, the design and shape of the

energy label and how the label is to be affixed to the appliance. “Part 2” also contains any requirements for MEPS for the particular appliance or equipment type which is now a more common regulatory requirement.

This Standard structure provides a “one-stop energy labelling shop” for industry and regulatory agencies, addressing not only testing and performance requirements, but also energy labelling and minimum energy performance requirements.

In updating the test methods, issues that had to be considered by the Standards Committees, and which were sometimes balanced against each other included:

- The requirement for any Australian or Joint Standard to adopt the relevant IEC or ISO Standard wherever feasible.
- The need for repeatability and reproducibility in testing.
- The requirement that units tested according to both the proposed and existing methods would generally need to achieve at least similar energy usage figures where possible, so as to avoid confusion over relative energy consumption/ efficiency.
- The need to cater for every design on the Australian or New Zealand market.
- The aim that the test methods should be relevant to actual usage by consumers.

Manufacturers must now state, either on the appliance/equipment, or in the accompanying literature, parameters such as capacity and settings that will be used in the performance tests. This information provides consumers with information essential to the choice of an energy efficiency product that matches their individual needs.

Each Australian Standard for energy labelling contains minimum performance requirements (eg temperature operation test for refrigerators, minimum wash performance for dishwashers and clothes washers). Most Australian energy labelling and MEPS Standards are now jointly published with Standards New Zealand.

In addition to a new approach to structuring information in Australian Standards, State and Territory governments, in consultation with appliance manufacturers, have sought to harmonise their energy efficiency labelling legislation. The role of the harmonised legislation is to set out the legal requirements for energy efficiency labelling, including offences and penalties (eg that all relevant domestic appliances must bear an approved energy label before they can be offered for sale in Australia). Model legislation has little technical content in relation to the requirements for energy labelling - it merely refers to the relevant Part 2 standard for each appliance type. The introduction of model legislation in each State and Territory has led to a consistent approach to energy efficiency labelling and performance standards across each Australian jurisdiction. Each of the States has repealed their previous regulations, replacing them with the model legislation. The prospect for variations within relevant legislation is thereby minimised.

State and Territory regulatory agencies are actively involved in all relevant Standards committees which deal with energy labelled appliances. Such a system of common Standards and uniform legislation has much to recommend it as it provides a uniform technical basis for the on going development of the energy efficiency labelling program. Importantly, it allows uniformity to be maintained across a wide range of jurisdictions when technical changes to the program are implemented.

Related Program Activities

Apart from the regulatory and Standards changes outlined above, there is a wide range of related energy efficiency labelling program activity under way in Australia. Following is a description of the most significant activities:

Information Programs

Development of an electronic database and Internet site: This database covers all appliances registered for energy efficiency labelling in Australia. It provides regulatory agencies with a complete set of data for energy efficiency labelling. Selected parts of the database are also used to support information programs, such as appliances listings and brochures which compare the energy efficiency of all models on the market.

All current models on the market in Australia are listed on the Internet site www.energyrating.gov.au. The web site includes detailed information on application requirements for manufacturers, references to relevant Standards, buying tips for consumers, and lists of the most efficient models in each category of appliance. The website also includes a search/sort facility, as well as providing a downloadable version of the public data for current models for subsequent analysis by consumers, industry and policy makers.

TESAW and Galaxy Awards: Since 1988, the most efficient models on the Australian market have been recognised in the annual Galaxy Awards. The Awards provide widespread recognition for those products with outstanding efficiency, both within the appliance industry and by consumers. From November 1, 2003 the Galaxy awards were replaced by the TESAW (Top Energy Saver) Awards. Details regarding the TESAW awards are available on www.energyrating.gov.au

International Review of Energy Labelling and MEPS Programs: A review of energy efficiency labelling and MEPS programs (either in operation or proposed) has been undertaken and the key findings of the report (together with sample labels) can also be found on www.energyrating.gov.au. This work demonstrates the importance with which governments regard these types of programs.

Evaluating the Energy Labelling Program

Tracking Sales Weighted Efficiency: Since 1993, individual models sales for refrigerators, freezers, clothes washers, clothes dryers and dishwashers have been tracked for the biggest selling models. Sales data has been crossed matched to the energy labelling database to allow the calculation of sales weighted appliance capacity and energy efficiency trends. Eight years of data has now been analysed. This aggregated data forms one of the key performance measures used to track the impact of energy efficiency labelling and MEPS programs in Australia. Results of this analysis is now published annually in a publication entitled “Greening Whitegoods” available at www.energyrating.gov.au in the electronic library.

Compliance Monitoring: Although some States had good data on the level of compliance, uniform national data was not available. Comprehensive surveys of retailers have been undertaken to benchmark the level of compliance in relation to the display of labels at the point of sale. This has been used as part of the overall process evaluation for the energy labelling program. Selected reports are available from www.energyrating.gov.au in the electronic library.

Check Testing Program: To ensure a high degree of credibility and compliance, the governments of Australia undertake a national check testing program. Appliances are purchased from retail outlets and tested in accredited independent laboratories to verify the claims associated with the energy label. Any non-compliance gives rise to a range of sanctions, including deregistration which prohibits sale of the model affected, and referral to the Australian Competition and Consumer Commission for investigating misleading and deceptive conduct allegations.

Improving the System & New Program Measures

Energy Labelling Review: An extensive review of the energy efficiency labelling program was commenced in early 1998, including a revision of the energy efficiency labelling algorithms for all labelled appliances. The committee undertaking the work was made up of government, industry and consumer representatives.

Over about 10 years the continuous improvements in appliance performance had resulted in star ratings clustering at the top of the range. To overcome this inhibition on further efficiency improvements, the committee recommended the introduction of new algorithms (used to calculate the ‘star’ rating) to provide expanded scope for improvements in energy efficiency (5 star units became 3 – 3.5 star units) and revised labels (with a maximum of 6 stars compared to the maximum of 5 stars on the previous label). The new labels were introduced in 2000, and it became compulsory for all display stock to carry these labels from 1 October 2000. A report that details all facets of the transition to the new label can be found on www.energyrating.gov.au in the electronic library.

International Standards Participation: Australia has continued its active participation in the development of IEC and ISO international performance standards for appliances and equipment covered by MEPS and energy labelling in Australia, with a view eventually to adopting these test procedures as national standards, once the major technical issues have been adequately addressed.

End Use Data: NSW electricity companies undertook a detailed end use metering project for some 290 households during 1993/94 (half hour data for some 1,800 appliances for over 1 year). While the data was commercially sensitive as a result of the introduction of competition into the electricity supply industry in many parts of Australia, limited access to the data was negotiated to allow extraction of data on frequency and duration of use of appliances. This has assisted in making the energy labelling program more relevant and helpful for consumers.

New MEPS Levels for Appliances and equipment: As outlined in Table 1b, many products are scheduled to have new MEPS levels introduced or existing MEPS levels revised. Some products will also have changes to their energy labelling requirements. Detailed technical reports for each of these changes and Regulatory Impact Statements can all be found on www.energyrating.gov.au in the electronic library.

Energy Star: The Energy Star program for office equipment has been implemented nationally. For more information see www.energystar.gov.au

Energy All Stars: The Energy All Stars program aims to facilitate the purchase of high efficiency appliances and equipment by governments, government agencies and large corporate users. It also provides information to users on the most efficient products on the market. More information can be obtained from www.energyallstars.gov.au

Conclusion

Appliance energy efficiency is now a key program area for all Australian governments, serving greenhouse gas reduction, economic efficiency and resource conservation policies. Governments, the appliance industry and consumer groups are now all playing key roles in promoting greater appliance energy-efficiency in Australia. The high degree of co-operation and consultation between all parties has resulted in the rapid and harmonious development of the program.

The overall policy objectives of Australian governments are set out in *The National Greenhouse Strategy* (1998, page 48) in the following terms:

4.10 Energy performance codes and standards for domestic appliances and commercial and industrial equipment

Improvements in the energy efficiency of domestic appliances and commercial and industrial equipment will be promoted by extending and enhancing the effectiveness of existing energy labelling and minimum energy performance standards programs. This will be perused by:

- *developing minimum energy performance standards for a broader range of new appliances and equipment;*

- *regulating or developing codes of practice to ensure the adoption of energy performance standards;*
- *revising the technical framework of the labelling program to keep pace with improvements in product efficiencies including 'super efficient' appliances;*
- *working with industry to improve gas appliance minimum energy performance standards (MEPS) and labelling programs;*
- *ensuring consistency of approach between Australia and New Zealand wherever possible.*

Attachment 3 – Registration of Similar Models - Families

Regulatory agencies propose to follow standard procedures for related appliances sometimes referred to as families. If the registration is for a family of models (of the one brand) as defined in the relevant Standard, one application for registration will be sufficient to cover all models. Those applicants who wish to specify a range of models on the same application should refer to the relevant provisions of the State and Territory legislation.

The intent of a family is to allow manufacturers to group models which are closely related into a single registration application to reduce registration costs. There are a number of special cases with regard to families that are described below. In most cases all units within a family will be of the same general configuration, performance, capacity and energy consumption. The use of families is to primarily cover variations in a product that may affect model number but that are not relevant to energy performance (eg colour, left or right hand doors, trim, etc.)

Regulators allow energy variants (ie products with the same model number and performance characteristics but with different energy consumption) to be registered under a single registration only if the variant with the highest energy consumption is used as the basis for the registration. However, separate registration of each variant is preferred.

Where several models are covered by a family registration, only a single record on the registration database and website will be provided in most cases. Separate listing of each model on the registration database can only included as a separate registration application for each model.

A family of models can cover only a single brand of a particular model. Even where a single manufacturer supplies identical products as different brand names, separate applications must be made for each brand. However, a single test report can be used to support registration applications for several different brands.

Where a family of models is registered, all models covered by the registration are included in any regulatory action that may arise from checktesting of any of those variants. Similarly, where a single test report is used to support multiple registration applications (re-registrations or multiple brands), any regulatory action that may arise from checktesting of any of those models covered by this test report may also be affected.

Where a new model comes onto the market, it is necessary to notify the regulator. Usually a new model is included as a new registration or a re-registration of a model or family with the new details included. Some regulators may allow an existing registration to be amended to include new models in some circumstances.

Energy Labelling

The following approach has been developed to cover the inclusion of a family of models on a single energy label:

1. The model designations may be separated by a slash on the label
e.g. THIS XYZ REFRIGERATOR
MODEL R315A/R325A/R315B/R325B/R335C USED

Note : A maximum of one print line can be used for model designation for an energy label

2. Generic model designation characters may be replaced by asterisks
e.g. The above example becomes
THIS XYZ REFRIGERATOR
MODEL R3*5* USED

Note : While the single model designation using asterisks may be used on the energy label, the full model designations for all the models covered by the particular label must be listed in the application for registration. All of the individual models covered by each application are considered to be public data fields and are supplied in the downloadable versions of current models. This is necessary as non-commercially sensitive label registration information is widely disseminated to the public and this information, particularly model designations, must be able to be easily understood. Regulators also use this information to check compliance with energy efficiency regulations. If a new model(s) is introduced which uses an existing label then the manufacturer or importer must notify the appropriate regulator of the full model designation(s) for this new model(s).

Special Cases

Split-system Air Conditioners: Where a split system model number denotes a single combination of inside and outside units, then the system model designation shall be specified on the energy label. Where a split system does not have system model designation as defined above, then the model designations of both the inside and outside units of the system shall be specified on the energy label.

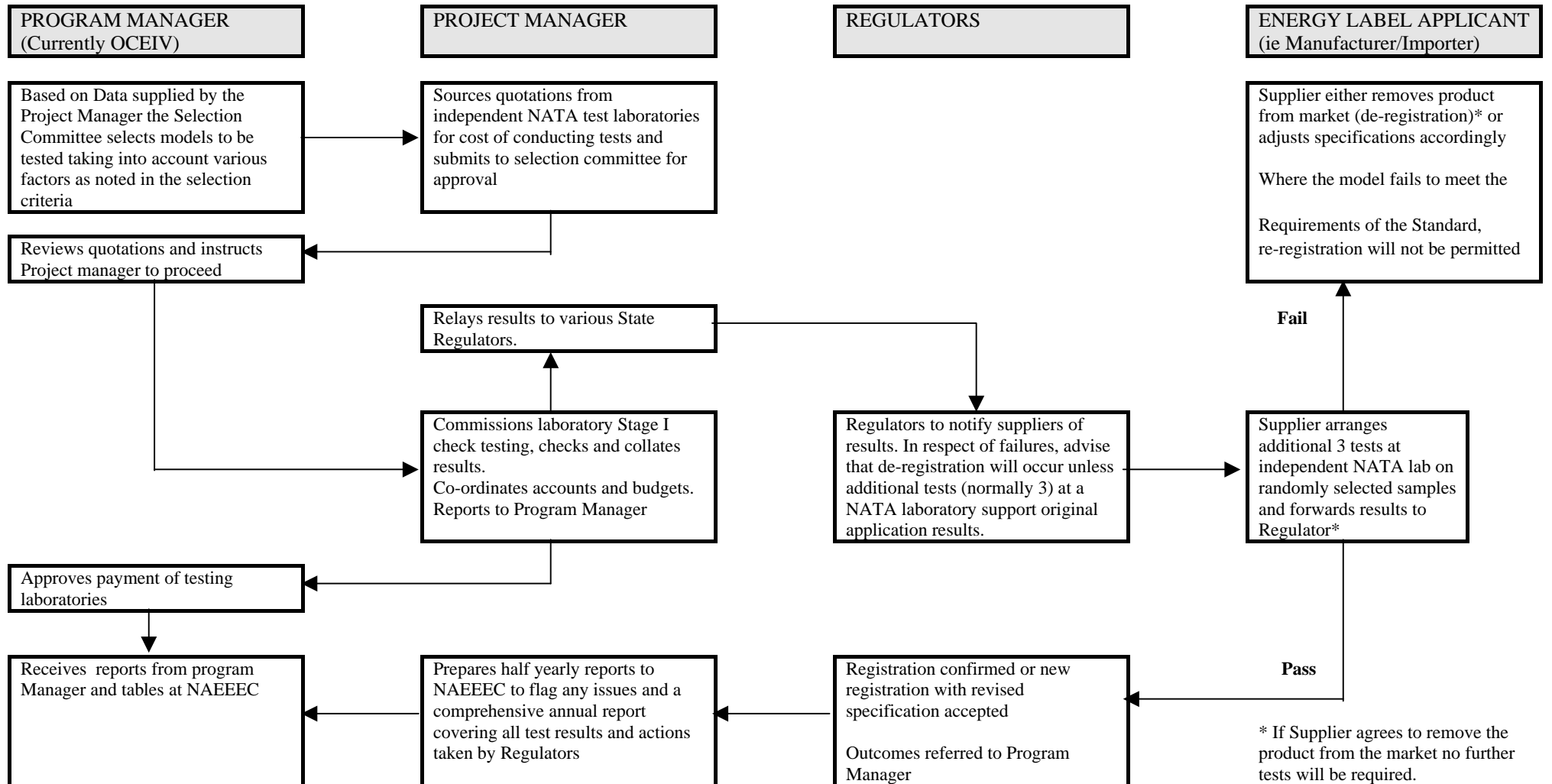
For split system air conditioners, where there are variants that are available as either single phase or three phase, these have to be separately registered even if their performance is the same (ie these variants cannot be considered as a family). This is because there may be different MEPS requirements for single and three phase models of the same capacity output.

For split system air conditioners, a unit that uses a single outdoor unit with several options for indoor unit may be registered for these options as a single family as long as the performance of all of these options is comparable. Where registered as a family, the registration application must include data for the unit option with the lowest EER and COP values to demonstrate compliance with MEPS and for energy labelling (as applicable).

For three phase electric motors only, some regulators have special arrangements to allow nominally different products to be grouped into a family to reduce registration costs for applicants. Where bulk registrations are entered together, regulators may allow motor families to consist of one framesize which is grouped across power output sizes or across pole variants. Pole or power output variants are displayed as separate records on the registration database.

For electric storage and heat exchange water heaters (as defined in the standard), models in a family have the same relevant physical characteristics, rated heat loss, and performance characteristics. Two or more variants of a model may use a single family registration which is based on the highest heat loss of those variants or the variant with the lowest performance. A family of models will all have the same basic configuration such as container size, number of elements, number of pressure relief valves etc. A variant has the same sales specifications and the same model number or other form of designation as another version of the model, and offer either: a) same performance with a different heat loss; or b) different performance with the same heat loss.

Attachment 4 – Check Testing Flow Chart



Attachment 5 – Check Testing Product Selection Criteria

Recommendations for appliance and equipment groups and models to be tested are to be based on the following criteria with reference to the information sources listed under each factor noted below.

1. GROUP SELECTION - FACTORS FOR CONSIDERATION

1.1 Plan to Cover all Groups

Over a two to three year period, there is a strategic plan to ensure that most major categories and types of appliances and equipment are included to ensure a broad and consistent coverage of the entire market.

Source of Information: Check test annual reports

1.2 Number and turnover of models

Regard should be given to the numbers of models and the annual turnover of new models of each appliance group. Appliance groups will be given attention in proportion to such numbers and or turnover.

Source of information: Energy Labelling Register and Energy Labelling Brochures

1.3 History of Non Compliance in each appliance group

Groups with a demonstrated history of high levels of non-compliance should be selected because of the likelihood of a continuation of such historical trends.

Source of information: Check test data base

2. MODEL SELECTION - FACTORS FOR CONSIDERATION

A system of weighting and prioritisation for each the following factors is in use.

2.1 History of testing of specific models

Models tested in previous years of the check test program should normally be excluded from any further testing unless specific evidence becomes available to suggest that a re-test is warranted.

Source of information: Check test data base

2.2 Age of Models

Newer models should normally be given preference when considering models for check testing because of their potential to remain on the market for a longer period as compared to older models. The exception to this rule is models that have been on the market for a considerable period of time (3 years or more) without being subjected to testing.

Source of information: Energy Labelling Register and Energy Labelling Brochures

2.3 Volume of Sales of models

Models with high volumes of sales should normally be given preference when considering models for check testing because of their greater potential to impact on energy usage as compared to models with low sales volumes.

Source of information: Market Survey Data e.g. GFK Whitegoods survey, commercial market share reports.

2.4 Star Rating of Models

Models with the highest claims for energy efficiency (eg. high star ratings) should normally be given preference when considering models for check testing because of the market's higher expectations with respect to the performance of these models as compared to models with low ratings.

Source of information: Energy Labelling Register and Energy Labelling Brochures, award nominations

2.5 Record of non compliance by supplier

Suppliers with a demonstrated record of check testing non-compliance should be subject to greater scrutiny in the check testing program because of the likelihood of a continuation of such historical trends.

Source of information: Check test data base

2.6 Third party referrals

Complaints as to the accuracy of express (labelling etc) or implied (MEPS) energy use/efficiency claims from third parties such as competitors, consumers, consumer groups or regulatory agencies, will be considered by the Manager, Check Testing Program. The Manager, Check Testing Program will be responsible for establishing a complaints handling mechanism that reflects best practice, and will include a 'complaints' report in the Annual Check Testing Report.

Source of information: Manufacturing Competitors either directly or via Regulators, ACA, or other sources.

2.7 New Brands

New Brands to the Australian market shall be selected as a higher priority for checktesting.

3. UNIT SELECTION – PROCESS

This section sets out the process for selection of units for check testing.

3.1 Screen Test Selection

Once a model has been selected for check testing, it is usual that the unit which is obtained for the initial screen test be purchased anonymously through a retail or wholesale supplier. Check tests are normally contracted on a confidential basis and normally only NAEEEEC and their contractors will be aware that particular models have been acquired for test. Nonetheless, the laboratory contracted to undertake the tests will ensure that the unit is stored securely with no access by any third parties while it is in their possession and will keep information on which product types, brands, models are under test strictly confidential.

3.2 Opportunity to View the Test Unit

At the sole discretion of the program administrator a product supplier may be offered the opportunity to attend the Laboratory and inspect the test unit on the following terms:

The inspection can, at the absolute discretion of the Laboratory, take place in the test rig or alternatively in a separate room outside the actual test area. The inspection shall occur on or before the day of the test as advised by the Laboratory.

Instead of attending, the Supplier may nominate a representative to attend the Laboratory in order to inspect the test unit on its behalf.

If the Supplier of the tested product is offered the opportunity to attend the Laboratory and inspect the test unit, the Supplier may request to be supplied with information by the Laboratory regarding the commissioning of the test unit (eg Refrigerant charge to be applied to a split system air conditioner) as well as details of user selectable settings or appliance operating procedures (eg program selection and dosing arrangements for detergents in a clothes washer test) to be used during the testing.

The Supplier cannot enter any part of the Laboratory without the approval of the testing officer at the Laboratory. The Supplier cannot attend the actual test of the test unit. If the Supplier is of the opinion that the test unit or information relating to its set up are unsatisfactory, the Supplier should inform the testing officer at the Laboratory and the Program Administrator of his /her views as soon as possible. The Program Administrator may direct that the test procedure be amended or a new test conducted if satisfied that it is appropriate to do so.

The time that the Supplier may take to view the test unit and the set up of the test is at the absolute discretion of the testing officer at the Laboratory.

The supplier shall be responsible for contacting the testing laboratory and making all necessary arrangements with them to attend the test. Any rescheduling of test times that the supplier may desire shall be at the absolute discretion of the test laboratory.

3.3 Stage 2 Unit Selection

Where a check test proceeds to Stage 2, the registration holder is normally asked to supply randomly selected units. To ensure that the units supplied for test are randomly selected, one of the following processes shall be adopted:

- The registration holder will supply the serial numbers of all units in stock to the relevant regulator and the regulator will select units from this list.
- The regulator or their representative shall visit the relevant warehouse where units are stored and units for test are selected.
- If there is any doubt about the veracity of the above alternative selection processes, the regulator may elect to obtain the additional units anonymously through the normal retail or wholesale supply process. In such cases the supplier shall be required to reimburse the full purchase cost to the program.
- In all cases, the original packaging of units shall be in tact on delivery to the relevant test laboratory.

Attachment 6 – Check Testing – Description of the Process

The check testing process discussed below supplements the testing and cancellation procedures set out in relevant State and Territory legislation. The check test procedure discussed below should be read in the context of that legislation.

Stage I Check Testing (also known as the screen test)

Initially, a Stage I check test, which is a full or part test to the relevant Australian and New Zealand Standard, will be performed on one sample of the model. This sample will generally be independently purchased (usually through a retail outlet) and tested by a laboratory accredited for check testing on behalf of the regulatory authorities. However, it should be noted that the State and Territory legislation does provide that a registration holder may be required to provide a sample of registered proclaimed equipment. In cases of Stage I check test non-compliance (as determined in accordance with the validity criteria set out in Attachment 8 of these Guidelines) the supplier may choose to request cancellation of the registration for the model in question on the basis of the Stage I check test result or, alternatively, a supplier may choose the option of proceeding to Stage II check testing.

An appliance that has failed a Stage 1 check test will not be released from the check testing laboratory until the outcome of the check test failure has been finalised to the satisfaction of the relevant regulator. The sample used for the Stage I check test will not be sold until Stage II check testing is completed or until the non-compliance matter is otherwise satisfactorily resolved. Upon satisfactory resolution of the matter a supplier may make application to purchase the appliance from the check test laboratory. Following such a sale, no further claims in respect of the check tested appliance shall be accepted by the regulator.

In accordance with the requirements of the relevant testing standards, prior to test measurements being collected, a laboratory is required to check each sample to ensure that it has no obvious operating defects. In the absence of such advice from the test laboratory (or from the supplier who inspects the unit as described in section 3.2) it will be assumed by the regulator that no defects existed in the tested appliance.

The onus shall be on the manufacturer/importer to provide evidence that a defect capable of affecting the test results does exist (failure of the appliance to pass a check test would not in itself constitute such evidence). Furthermore, it must be demonstrated that the "defect" is peculiar to the test unit alone and not common to other samples of the stock of the appliance. If such evidence is provided and accepted, the original check test will be voided and a new check test will be required to be undertaken at the same laboratory either on the original unit with repairs or on a randomly selected second sample of the stock. The costs associated with inspection and re-testing of defective samples shall be borne by the manufacturer/importer.

Stage II Check testing

Upon receipt of a stage I check test failure report the relevant regulator shall issue to the registration holder for that product a notice of intention to cancel the energy labelling registration.

The registration holder shall have a minimum of 15 working days from the date of the notice of intention to cancel, within which to make written submissions to the regulatory agency as to why the registration should not be cancelled.

Those written submissions should provide details and a timetable for a Stage II check testing program. Stage II check test procedures require that satisfactory test reports from an accredited check testing laboratory on either two (where the failure relates to performance standards) or three units (where failure relates to a 'supplier declaration' ie, claims on labels etc) be supplied to the regulator. If the submissions provided by the registration holder are not, in the regulatory agency's opinion, satisfactory, or if the submissions set out details and a timetable for testing which is subsequently not complied with, the regulatory agency may decide to cancel the registration. See Attachment 7 for further information about cancellation.

The actual units to be tested in Stage II will be randomly selected from stock by a representative of the regulatory authority.

Costs

Stage I check test costs will generally be met by the regulatory agency and NAEEEEC (noting that NAEEEEC has entered into agreements with a number of industry associations to reimburse the program for both the cost of the test unit (which shall be returned) and the cost of the test and test report (which shall be provided to the supplier) irrespective of the checktest outcome). Where the registration holder elects to undertake Stage II check testing, the registration holder will be liable for all Stage II check testing related costs irrespective of the outcome. Where a unit selected for check testing is demonstrated to be defective in manufacture, then the registration holder will be liable for all resulting additional costs incurred for check testing.

Screening Tests Conducted by Competitors

Where a product fails a screening test conducted at a NATA accredited laboratory (or one affiliated with an organisation with a mutual recognition agreement with NATA) and the test report is provided by the party that commissioned the test to a regulator or NAEEEEC, NAEEEEC will generally reimburse the (reasonable) costs of conducting the screening tests.

Laboratories Accredited for Check Testing

Only NATA or other laboratories accredited by bodies with a mutual recognition agreement with NATA, and with a registration that permits the laboratory to issue test reports for the test in question, will be contracted by NAEEEEC to undertake check testing wherever possible. In circumstances where Stage II check testing can be undertaken at a supplier's own Australian located NATA registered laboratory, regulatory agencies will accept the results provided a NATA appointed witness is present throughout the testing. Costs associated with the provision of a NATA appointed witness will be borne by the supplier.

Number of Tests

For failures which fall into the "supplier declaration" category (see Attachment 8), regulatory authorities require three samples to be tested in Stage II check testing to establish, in accordance with the validity criteria, whether the registration of a model will be maintained. However, the manufacturer or importer can choose to accept the results of check tests undertaken on fewer than three samples if the results of each sample subsequently tested also do not confirm the original claims made by the registration holder in the application for registration.

For results which fall into the "performance limit" category (see Attachment 8), regulatory authorities require at least two samples to be tested in Stage II check testing to establish, in accordance with the validity criteria, whether the registration of a model will be maintained. However, three tests taken together in Stage II is the preferred course of action.

Test Requirements

All testing will be undertaken in accordance with the requirements of the relevant Standard.

Attachment 7 – Description of Procedures Relating to Non-Compliance

Scope of Action

The regulatory agency in the jurisdiction where a model is registered will initiate appropriate action if the check test results indicate that a model does not comply. If the model which does not comply is one of a family of models, then all models in this family will be affected. Models which are registered separately, including models of a different brand (or brands), but which have used the same test report(s) for registration and are, therefore, equivalent in terms of energy labelling/MEPS to the model which has found to be non-compliant, will also be affected.

Cancellation of Registration

If it is determined that cancellation procedures should be initiated by the regulatory agency, then the regulatory agency will notify the registration holder of its proposal to cancel registration and will allow the registration holder the period specified in the regulations (generally 15 days) to show cause why the registration should not be cancelled.

If a decision is made to cancel a registration and a registration holder anticipates that it will face some difficulty in ensuring the immediate withdrawal from sale of a deregistered appliance, the registration holder should initiate discussions with the appropriate regulatory agency at the earliest possible opportunity.

In cases where a regulatory agency has cancelled the registration of a model for energy labelling or MEPS, then the regulatory agency will immediately inform all other jurisdictions of the circumstances surrounding the cancellation. An Incident Report will be used for consultation/coordination between regulators.

Treatment of Models for which Registration has been Cancelled

1. In cases where registration has been or will be cancelled due to instances of non-compliance related to the measurement of label energy, EER/COP or model capacity, the model may be re-registered.

Under certain circumstances, the applicant for re-registration may be able to use test reports from the Stage II check testing. However, this could be problematic in cases where not all the data required for an application for registration is measured in Stage II check testing (e.g. where only the cooling cycle performance of a reverse cycle air conditioner is measured during Stage II check testing). Use of the Stage II check test results is not applicable in cases where the product fails any of the mandatory performance requirements set in Part 2 of the relevant standard.

2. In cases where registration has been cancelled due to instances of non-compliance related to performance criteria (including MEPS), the model will not be able to be sold until:
 - it can be demonstrated that alterations have been made to all units to ensure that the relevant performance requirements can be met, and
 - the model has subsequently been re-registered.

Attachment 8 – Validity Criteria – Energy Consumption & Performance

Check testing is an essential part of the energy efficiency labelling program and has the aim of verifying that the performance of products on the market meet suppliers' energy efficiency and other performance claims, as well as the claims contained in original energy labelling applications. The check testing process is the major quality assurance procedure for the energy efficiency labelling scheme and with the introduction of MEPS there is a need to define check testing validity criteria for performance standards as well as for energy labelling.

Validity criteria should ideally be developed to account for inherent product variability, inter-laboratory variability (reproducibility) and intra-laboratory variability (repeatability) (some of which will be attributable to testing apparatus), so that there is a low probability of:

- passing models where the label claims do not reflect the actual values for the entire population of the model in question and which should, therefore, fail check testing; or
- failing models which should pass.

During 1999, a statistical consultancy was commissioned to prepare a methodology to determine an approach for verification or rejection of a supplier's claim, based on the testing of up to three units via check tests. The following validity verification process is drawn from the recommendations of this report, which was updated in 2004. A copy of the full report is available from www.energyrating.gov.au under Administrative Guidelines.

Note: These criteria relate only to the verification of the claim associated with energy labelling or MEPS - they must not be interpreted as an allowed tolerance on the original test measurements used to support an application for registration.

Verification criteria and limits for newly regulated products will be included in a forthcoming revision of these guidelines.

Supplier declarations

A Supplier Declaration is a declaration of energy or performance made either within an energy labelling application or through manufacture information supplied with the product (accompanying literature, user manuals, information affixed to the product such as a rating plate) or at the point of sale (advertising). Supplier declarations include:

- Declared energy consumption for all products (eg energy label)
- Air conditioner heating and cooling capacity
- Air conditioner efficiency (EER or COP)
- Clothes washer spin performance

The general rule for verification of a supplier's declaration is:

- A single Stage I check test must not be more than 10% worse than the declaration (Stage I);
- If this is found to be the case, a further three units (randomly selected by the regulator) are to be check tested at the supplier's expense (Stage II);
- If the mean of the three additional units checktested for Stage II are found to be more than 10% worse than the declaration, the product fails.

The consultancy found that for typical measurement errors and variability, the current rule of allowing a 10% variation as the trigger for additional check tests and as the basis of verification of a further 3 units is sound³. The consultancy also found that the probability of deregistration of a model under this rule is extremely small if the supplier's original declaration is in fact accurate.

³ This rule does not state that a declaration of up to 10% from actual is acceptable. The above process is used to verify the original claim. The probability of a check testing failure and subsequent deregistration increases markedly in cases where the supplier's original claim exceeds the actual/"true" performance level.

The following supplier's declarations are used to verify other performance characteristics of appliances so are only subject to indirect verification:

- Clothes dryer capacity (0.5 kg steps)
- Clothes washer capacity (0.5 kg steps)
- Dishwasher capacity (whole number of place settings)

It is important to note that verification tolerances are not applied to checks of supplier declarations – the assumed limit of 10% (or the relevant limit for other variables) includes allowances for elements such as production variability, measurement accuracy and uncertainties.

A special case is the volume declaration for refrigerators and freezers, where the Standard specifies an allowable tolerance of 3% on the measurement (note that the precise rule depends on the compartment volume). Given that the measurement of gross volume by third parties is difficult in some cases (and therefore subject to some uncertainties), the check testing tolerance for refrigerator volume is set at 5% less than the declared value before regulatory action is to be taken (ie an allowance of 2% above the tolerance value specified in the standard).

A second special case is the verification of the rated hot water delivery volume for an electric storage water heater. The standard does not specify any tolerance on the measurement of hot water delivery during a verification test. Given that the volume of water and its temperature can be measured with some degree of certainty, a tolerance limit of 3% has been set for this variable.

Performance Limits

A Performance Limit is the minimum required level of a performance measure specified in the relevant Australian Standard. Generally, performance limits are determined by the relevant standards committee and are set at a level that provides a level of energy service that could reasonably be expected by a consumer.

Performance limits are set primarily for consumer protection. Minimum Energy Performance Standard (MEPS) are a performance limit that relates specifically to the energy efficiency of an appliance (eg maximum allowable energy consumption for a specified size and/or features) - these are usually set by governments (but not in all cases). From 1 October 1999, refrigerators, freezers and electric storage water heaters have been regulated by Governments for MEPS. A range of other products have subsequently had MEPS requirements introduced.

In Australian Standards, a wide range of mandatory performance limits are specified and required for regulatory purposes. These are set out in Table 2: Verification limits - Minimum Performance Requirements below.

For the verification of minimum performance limits, it is assumed that the actual performance across individual units of the same model is normally distributed. The standard generally specifies that each unit shall meet the required performance limit, where these are set. Under a normal distribution, it is not possible to be assured that all units will be able to pass the standard minimum requirements so an alternative approach is used. For the verification of minimum performance limits, a practical requirement is to allow the worst 10% of units of a particular model to fail the limit stated in the standard (meaning that 90% are required to pass the limit). Given that the measurement error is typically of equal magnitude to the variability of the test measurement, this limit has been doubled to 18% of units.

The practical general application of this rule is:

- A single initial Stage I check test is conducted and the unit must not fail the performance requirements specified in the standard (Stage I);
- If it does fail, a further two units (randomly selected by the regulator) are to be tested at the supplier's expense (Stage IIa);
- If both of the additional units tested for Stage IIa are found to fail the performance requirements specified in the standard, the product shall fail.
- If both of the additional units tested for Stage IIa are found to pass the performance requirements specified in the standard, the product shall be deemed to pass.
- If one of the additional units tested for Stage IIa is found to fail the performance requirements specified in the standard while one passes, one additional unit is tested (Stage IIb).

- If two of the additional three units tested in Stages IIa and IIb are found to fail the performance requirements specified in the standard, the product shall fail.
- If two of the additional three units tested for Stages IIa and IIb are found to pass the performance requirements specified in the standard, the product shall be deemed to pass.

If 3 units are initially tested in Stage II, then Stages IIa and IIb above are not required. However, 2 of the three units tested in Stage II must pass the requirements. For some products, a larger sample may be requested to verify the Stage II check test requirements (eg for fluorescent lamps where product variability may be a factor). For some larger products such as certain models of distribution transformers, a sample of 3 units may not be possible.

Unlike other MEPS products in Australia, domestic refrigerators and freezers follow an approach where the MEPS level applies to the average of production rather than defining an absolute maximum allowable for every individual product. To verify compliance with MEPS for this product regulators have to establish the likely average energy for the product and whether this exceeds the MEPS level or not so this product is subject to a different verification procedure.

Where there is a known margin of error or uncertainty in the measurement procedure for a particular test, then this value will be used as a verification tolerance by the regulatory agencies on the performance level specified in the standard. Generally, this measurement error is set at a maximum of 2% of the performance level specified, except in cases that are documented to have different measurement errors on the basis of a series of round robin tests conducted for regulatory agencies or on error analysis. Regulatory agencies will also take into account other factors where these are known to impact on the performance measure, such as the calibration of swatches used to assess washing performance of clothes washers. Verification tolerances are only applied to results for performance limit parameters from units tested in Stage II check tests.

Complex Performance Requirements

In Australian Standards, the following mandatory performance limits are specified and are required for regulatory purposes and are defined as "complex" for verification purposes:

- Refrigerator temperature operation test (complex)
- Clothes dryer dry clothes in a single operation (complex)
- Clothes dryer maximum allowable drum temperature (complex)
- Air conditioner maximum cooling test (complex)

For complex tests with multiple pass/fail criteria, it is not possible to define simple validity criteria. Explanations are provided below:

- *Refrigerator temperature operation test* - the unit is tested with one to several control setting combinations to establish that the unit has at least one combination of control settings where all internal compartment temperature requirements can be met simultaneously under the specific ambient temperature (tests at 10°C, 32°C and 43°C are required for most product groups).
- *Dry clothes in a single operation* - clothes dryers are required to reach the specified final moisture content (6% of bone dry mass) within a single control setting (either via a timer or with an automatic sensor) before cooldown commences. There is no continuous measure for this test form for which a tolerance can be defined (the dryer either passes or fails).
- *Clothes dryer maximum allowable drum temperature* - theoretically the temperature measurement for this test is on a continuous scale so a tolerance could be defined. However, in practice, the temperature recording strips used record temperatures at about 5°C intervals and strips are selected to record temperatures just below the allowable maximum temperature (typically 128°C to 130°C) with the next step well above the allowable temperature. In effect, the tolerance for this test is built into the type of equipment used.
- *Air conditioner maximum cooling test* - this involves running the air conditioner under extreme conditions then shutting the power off. The air conditioner must meet various requirements after the restoration of power including no motor or wiring damage, as well as commence operation again within a specified period after the restoration of power without motor overload trips and to operate continuously for 1 hour.

The above complex performance measures and limits are verified or applied as defined in the relevant standards without any tolerance values. The same general rule applies to the verification of both simple and complex performance criteria (ie 2 + 1 rule set out above for a Stage II check test).

Related Situations

Occasionally, information on the performance of appliances or equipment from sources other than energy labels (eg. compliance plates, rating plates or product literature) conflicts with information on the energy label or contained in the application submitted for energy labelling or MEPS registration. Suppliers should be aware that such cases may be subject to action under energy efficiency labelling legislation and regulations or may be referred to the Australian Competition and Consumer Commission for investigation under the Trade Practice's Act. The Trade Practices Act carries heavy penalties for those found to have made false and misleading claims.

Summary of Check Test Limits

Table 1: Verification limits - supplier declarations

Supplier Declarations	Verification Limit Stage I	Stage II Check testing Number of units tested	Criteria for Passing Stage II Check testing
Energy declarations (input: all applicable products *)	1.1 × claim	3	Average < 1.1 × claim
Air conditioner cooling capacity	0.9 × claim	3	Average > 0.9 × claim
Air conditioner heating capacity	0.9 × claim	3	Average > 0.9 × claim
Air conditioner efficiency (EER & COP)	0.9 × claim	3	Average > 0.9 × claim
Clothes washer water extraction index	1.1 × claim	3	Average < 1.1 × claim
Refrigerator compartment volume	0.95 × claim	3	Average > 0.95 × claim
Rated hot water delivery capacity	0.97 × claim	3	Average > 0.97 × claim
Water consumption	1.1 × claim	3	Average < 1.1 × claim

Note *: For some products this limit is not applicable, eg ballasts, where the declaration is the Energy Efficiency Index (EEI) which is based on a total circuit power.

The following supplier declarations are not verified directly (declared value defines test conditions):

- Clothes dryer capacity (0.5 kg steps)
- Clothes washer capacity (0.5 kg steps)
- Dishwasher capacity (whole number of place settings)
- Electric motor output (kW)

Table 2: Verification limits - Minimum Performance Requirements

Performance limits	Verification Limit Stage I	Stage II Check testing Number of units tested	Criteria for Passing Stage II Check testing
Refrigerator pull down test	< 6 hours	2 + 1	2 of the 3 units passes the verification limit
Refrigerator MEPS (maximum annual energy)	Defined by group in AS/NZS4474.2	3 **	90% confidence that the mean does not exceed the MEPS level and mean energy with verification tolerance <1.03 MEPS
Clothes washer soil removal	> 0.80	2 + 1	2 of the 3 units passes the verification limit
Clothes washer soil removal less 2 × SD	> 0.72	2 + 1	2 of the 3 units passes the verification limit
Clothes washer water extraction index	< 1.10	2 + 1	2 of the 3 units passes the verification limit
Clothes dryer tested energy performance	< 1.36	2 + 1	2 of the 3 units passes the verification limit
Dishwasher washing index	> 0.90	2 + 1	2 of the 3 units passes the verification limit
Dishwasher drying performance	> 0.50	2 + 1	2 of the 3 units passes the verification limit
Electric storage water heater MEPS (maximum daily heat loss) *	Defined in AS1056.1 by hot water delivery and type	2 + 1	2 of the 3 units passes the verification limit
Air conditioner MEPS (minimum EER) *	Defined in AS/NZS3823.2 by output and type	2 + 1	2 of the 3 units passes the verification limit
Three phase electric motors MEPS (minimum efficiency) *	Defined in AS/NZS1359.5 by output and pole	2 + 1	2 of the 3 units passes the verification limit

Note *: The same procedure for MEPS verification limits applies to claims of high efficiency for the same product types where these are defined in the relevant standard.

** Additional units may need to be tested to establish the criteria in some circumstances. The procedure to determine MEPS validity for refrigerators and freezers is complex and was released for discussion in June 2005.

The following complex performance limits are verified or applied as defined in the relevant standards without any tolerance values:

- Refrigerator temperature operation test
- Clothes dryer dry clothes in a single operation
- Clothes dryer maximum allowable drum temperature
- Air conditioner maximum cooling test

For these performance limits, during Stage II Check testing, at least two units of the three additional units tested must satisfy the requirements for the model to pass check testing. No tolerance is allowed for these performance limits.

Note: Verification criteria and limits for newly regulated products will be included in a forthcoming revision of these guidelines.

Verification Tolerances

A general verification tolerance of 2% of the product specific minimum performance requirement (representing a typical uncertainty of measurement in an accredited laboratory) is allowed during Stage II verification tests, except in the cases shown below where specific testing has indicated that a different verification tolerance is applicable. These tolerances relate only to the verification of the claim associated with energy labelling or MEPS - they must not be interpreted as an allowed tolerance on the original test measurements for results which are submitted for registration.

Table 3: Verification Tolerance Limits for Specified Products

Product	Performance Parameter	Verification Tolerance
Clothes Washer	Soil Removal (and SR less $2 \times SD$)	0.03
Dishwasher	Wash performance	0.03
Dishwasher	Drying performance	0.03
Electric Water Heaters	MEPS (maximum daily heat loss)	3% of limit
Air Conditioner	MEPS (EER)	3% of limit
Three phase electric motors	MEPS (minimum efficiency)	Specified AS/NZS1359.5 Table 1.1 *

Note *: Limits in AS/NZS1359.5 for verification limits are:

- Motors to 50kW – summation of losses: verification tolerance -15% of $(1 - \eta)$
- Motors above 50kW – summation of losses: verification tolerance -10% of $(1 - \eta)$

Note: The reference to refrigerators and freezers has been deleted from this table as this was referring to a review of tolerance limits that would be undertaken as part of the review of the MEPS definition from an average value to a maximum value. A discussion paper on the verification of refrigerator and freezer MEPS under discussion.

Products will be added to the above tables as they are added to the regulatory program.

Attachment 9 – States’ & Territories’ Legislation and Subordinate Regulations

ACT	<ul style="list-style-type: none"> • Electricity Act 1971 • Electricity Safety Regulations 1971
NSW	<ul style="list-style-type: none"> • Electricity Safety Act 1945 • Electricity Safety (Equipment Efficiency) Regulation 1999.
NT	<ul style="list-style-type: none"> • Consumer Affairs and Fair Trading Act and Consumer Affairs (Product Information) Regulations
QLD	<ul style="list-style-type: none"> • Electricity Act and Regulation 1994
SA	<ul style="list-style-type: none"> • Electrical Products Act 2000 • Regulations under the Electrical Products Act 2000 (No. 224 of 2001)
VIC	<ul style="list-style-type: none"> • Electricity Safety Act 1998 Act No.25/1998 • Electricity Safety (Equipment Efficiency) Regulations 1999 S.R. No. 48/1999.
WA	<ul style="list-style-type: none"> • Electricity Act 1945 • Electricity Regulations 1947
New Zealand	<ul style="list-style-type: none"> • Energy Efficiency and Conservation Act 2000 • Energy Efficiency (Energy Using Products) Regulations 2002

Attachment 10 – Interpretations & Dispensations

INTERPRETATIONS

This section to be completed pending advice from State Regulatory Authorities.

DISPENSATIONS

This section to be completed pending advice from State Regulatory Authorities.

Attachment 11 - Application to Reproduce Energy Rating Label Imagery

This application form is designed to provide the National Appliance and Equipment Energy Efficiency Committee (NAEEEC) with relevant information about proposed usages of the Energy Rating label image, so as to allow it to decide whether this potentially compromises the credibility or integrity of the label itself, governments or government agencies (including NAEEEC) or the National Appliance and Equipment Energy Efficiency Program (NAEEEP). This application process applies to any proposed usage of the Energy Rating label, or likeness thereof, which is not a part of NAEEEP. The approval of any application is at NAEEEC's complete discretion, taking into account the circumstances of each case.

This form should be completed and returned along with any examples of the proposal and other supporting material to energy.rating@greenhouse.gov.au or

Equipment and Appliances Team
Australian Greenhouse Office
Department of the Environment and Heritage
GPO Box 787
Canberra ACT 2601.

Any queries regarding the application process can be directed to the above email address.

Applicant's details (Name, address, telephone, fax, email, homepage, etc)

Outline of activity/product/entity/etc to which application relates ("the subject").

Do you consider that the proposed usage has the potential to give the impression that the subject is endorsed, certified or approved by, or affiliated with, NAEEEC or other government organisations? (Please provide a detailed explanation of your answer).

Do you consider that the subject conflicts, or could potentially conflict, with the objectives of NAEEEC in promoting energy efficient appliances? (Please provide a detailed explanation of your answer).

Do you consider that there is potential for the proposed usage to bring the Energy Rating label itself, NAEEEP, NAEEEC or another government body into disrepute as assessed by either the general public or the target audience of the proposal? (Please provide a detailed explanation of your answer).

Is the proposed usage intended or likely to result in private financial gain? If so, please provide details.

Is there any other information relating to the application that you would like NAEEEC to consider in assessing this application?