27 May 2010

Dear Kathleen,

The New Zealand ENERGY STAR programme, run by the Energy Efficiency and Conservation Authority (EECA), supports the Draft Conditions and Criteria for Recognition of Laboratories proposed by the US ENERGY STAR programme.

To ensure the integrity of the ENERGY STAR programme, EECA expects that the regional New Zealand ENERGY STAR specifications that have been developed for whiteware (fridge/freezers, dishwashers and washing machines), heat pump air conditioners, solar water heating systems and compact fluorescent lamps (CFLs) would meet similar requirements as those outlined in the proposed criteria.

The following memo summarises the status of each regional product category and how it complies with the proposed criteria.

Whiteware and heat pumps

Similar requirements already exist for the New Zealand ENERGY STAR regional specifications for whiteware and heat pump/air conditioners.

One of the major reasons for developing these regional specifications was to ensure that these categories are aligned with the joint New Zealand and Australian Minimum Energy Performance Standards (MEPS) and Mandatory Energy Performance Labelling (MEPL) programme.

This alignment allows ENERGY STAR to validate compliance with ENERGY STAR energy efficiency criteria based on a products energy performance registrations.

Energy performance testing - laboratory requirements

All Australian MEPS & MEPL registrations require a lab report from a NATA (National Association of Testing Authorities, Australia) or similar accredited Laboratory.

For New Zealand registrations, whilst it isn't mandatory, the vast majority of manufacturers do submit reports from accredited labs. EECA strongly encourages manufacturers that don't to consider the potential legal ramifications if the product was to fail the check-testing process.

However, a summary laboratory report must be provided with the registration application in the format outlined in the 'Method of Test' section of the Standard which requires that all necessary fields are completed.

In order to meet their legal requirements under the New Zealand Legislation (Energy Efficiency (Energy Using Products) Regulations 2002), the applicant must "complete and submit the prescribed form to the authority" which, as outlined under the Energy Efficiency and Conservation Act 2000, is EECA.

Because the New Zealand and Australian markets have a high percentage of common products in these categories, the majority of MEPS/MEPL registrations for products, and so ENERGY STAR products, are supported by a NATA lab report to allow the product to be sold in Australia.

Under the Trans-Tasman Mutual Recognition Arrangement, registrations for the energy efficiency of products are mutually recognised between New Zealand and Australian State regulators.

There is also a Mutual Recognition Arrangement (MRAs) between IANZ and ISO/IEC 17025, and also between IANZ & NATA, both under the International Laboratory Accreditation Cooperation (ILAC), which was first started as a conference in 1977, with IANZ as a founding signatory (http://www.ianz.govt.nz/about2/worldwide.htm)

MEPS/MEPL validation or check-testing

In Australia all check-testing is carried out at a NATA Lab. In New Zealand EECA would use IANZ (http://www.ianz.govt.nz/) or similar accredited Laboratories for all testing.

The testing is carried out in accordance to an internationally recognised Energy Performance Test method (e.g. *AS/NZS 4474.1:2007*). Validation check-testing processes are highlighted in the MEPS/MEPL part of the relevant Standard (e.g. *AS.NZS 4474.2:2009)* and can be found in the Administrative Guidelines of the E3 Program (NAEEEP).

Inter-laboratory comparison ("Round Robin") testing is carried out, usually during the development of a new or revised test method.

Solar Water Heating Systems

Currently there is no MEPS programme to support the registrations of products under the NZ ENERGY STAR solar water heating system category. To accommodate the lack of a MEPS programme, the evidentiary requirements for the solar water heating specification were designed to be more stringent.

Testing and lab requirements

Manufacturers or suppliers must have their packaged solar water heating system performance modeled and provide corresponding report in accordance with *AS/NZS 4234:2008 Heated water systems – Calculation of energy consumption*.

Manufacturers or suppliers must have their packaged solar water heating system tested and provide compliance certificate in accordance with *AS/NZS 2712:2007 Solar and heat pump water heaters - Design and Construction*.

The supplier must provide a copy of the compliance schedule and a test report carried out by an approved test facility with the ENERGY STAR registration form.

An approved test facility is defined in the specification as one covered by the ILAC (International Laboratory Accreditation Cooperation) agreement to test to the applicable standard; or EECA has stated its acceptance of test reports from the facility for the applicable standard.

Compact fluorescent lamps (CFLs)

Currently the NZ CFL specification relies on manufacturers self-testing to *AS/NZS 4847.1:2010 Self-ballasted lamps for general lighting services - Test methods - Energy performance*.

A MEPS programme is currently in development and is expected to be launched in 2011. This will most likely result in a similar structure as the MEPS programmes for whiteware and heat pumps, with manufacturers strongly encouraged to test their products at an independent and accredited lab.

The NZ ENERGY STAR team will monitor the development of the CFL MEPS and will review the ENERGY STAR specification as required to ensure it is compliant with the proposed criteria.

Further information

Don't hesitate to contact me if you have any questions about the information contained in this memo.

Sincerely

Simon O'Brien
New Zealand ENERGY STAR Programme Manager
Energy Efficiency and Conservation Authority