

# LoadDown

#### THE STANDBY POWER NEWSLETTER





Load Down is supported by the International Energy Agency (IEA) Efficient Electrical End-Use Equipment (4E) Implementing Agreement.

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This edition of Load Down includes

- 4E Standby Power Annex agrees to an extension
- EU Confronting Network Standby
- SEAD network standby activities
- An overview of the Australian Standby Power and Battery Chargers
   Forum
- Standby Power Consumption in Australian homes

# 4E Standby Power Annex agrees to an extension

The fifth meeting of the 4E Standby Power Annex was held in October in Sydney, Australia. The main purpose of the gathering was to consider the worth of extending the Annex beyond the scheduled 2012 conclusion. In doing so the meeting reflected on the achievements of the Annex to date, the areas of standby power that still need to be addressed and the possible future outcomes the Annex could hope to attain.

The success of the Annex since its inception in 2009 are detailed in the document *What has the Annex achieved*. However, the four areas where major achievements have been made are:

- Alignment of data collection methodology – provides policy makers with baseline information and a tool which can assist in the design, monitoring and evaluation of different policy approaches.
- Horizontal Policy Framework

   provides policy makers with a framework to develop a successful horizontal standby power policy.
- Evaluation Framework –
   provides an instrument to
   design an evaluation approach
   which will not only be more
   transparent but enable different



policy approaches to be compared and contrasted.

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Network Standby Research

 provides a comprehensive overview of what network standby is, the size of the problem, opportunities for reducing wasted energy, and steps required to move towards developing policy options to tackle the issue.

In looking forward the Annex felt that there were still important issues to be addressed in Horizontal policy for standby power, in tackling the issue of networked products and the continuation of data collection work. The Annex also made a commitment to communicating both the work of the Annex and other credible groups active in the standby field. The aim of this is to ensure the studies and previous work carried out in the area of standby power are accessible and understood by a broad range of policy makers, experts and industry specialists. With these issues in mind, the Annex developed a work plan that includes the major deliverables listed in the table.

Task	Major Deliverables				
Horizontal Policy Approach	<ul> <li>Develop definitions of functions</li> <li>Create a list of power required for functions, functions present in modes and energy management specifications</li> </ul>				
Network Standby	<ul> <li>Policy framework for low energy networks</li> <li>A research report updating current knowledge and status of policy developments including policy options for networked products</li> </ul>				
Data Collection & Dissemination	<ul> <li>Provide web based access to data</li> <li>Data collection methodology for field measurement of networked products</li> </ul>				
Communications	<ul> <li>Communication Strategy</li> <li>Standalone standby power policy report</li> <li>Policy briefing documents</li> <li>Website enhancements</li> <li>Newsletters</li> </ul>				

The Annex reiterated its desire to work closely and cooperatively with other international standby partners such as the IEA network standby project and the SEAD network standby group. With an ambitious

work plan in place it is clear that there was a role for the Annex beyond the original 2012 conclusion and as such the Sydney meeting saw members endorse an extension of the programme until 2014.

## EU Confronting Network Standby

As discussed in the last edition of load down the European Commission is moving on recommendations of the Preparatory study (Lot 26) project on network losses. The proposal involves amending the current standby and off mode regulation EC/1275/2008 to include provisions to limit consumption in networked products. A draft working document of the proposed amendments was produced by the European Commission and discussed at a stakeholder consultation forum in September. Significant changes coming out of the forum include the reduction from 3 tiers to 2 (HiNA

and LoNA) and the possibility of a consumer warning label where products are deemed unable to meet levels due to circumstances beyond their control. It was also acknowledged that while these measures will contribute to reduce some of the issues associated with network standby there are other areas that need to be tackled. These types of approaches are not covered under Eco design regulation and would need to be looked at in a separate process.

The Commission is now preparing an impact assessment and a draft

final document for interservice consultation and voting by the Regulatory Committee. The timing of introduction will depend on resource availability at the Commission and priority versus other products; however the aim is for implementation in 2014. The working documents and explanatory notes from the consultation can be downloaded at http://ec.europa.eu/ energy/efficiency/ecodesign/forum\_ en.htm. The final report of the Lot 26 project and relevant documents can be found at http://www.ecostandby. org/documents.php.

# Australian Standby Power & Battery Charger Forum

Government and industry representatives gathered in Melbourne recently for the Standby Power and Battery Charger Forum. The purpose of the Forum was to discuss the latest developments in regulation for standby power and battery chargers and to highlight new issues in stand-alone and network standby. The key elements to be proposed in a Regulatory Impact Statement (RIS) for standby power along with proposed legislation for battery chargers were the feature presentations.

The RIS for standby power is currently being drafted by the Australian Government. The proposed regulations align with stage 2 of the European regulation - all electronic equipment should consume no more than 0.5 watt in passive standby with a 0.5 watt allowance for a meaningful display and a maximum 0.5 watt for off mode. The decision RIS will be finalised in 2012 and standby regulation in Australia will be introduced no earlier than October 2013.

The lack of regulation and considerable inefficiency of a diverse range of battery chargers from portable phone chargers

to electric car batteries was highlighted. Work is currently being undertaken internationally to consider regulation, particularly in method but at this stage it has not been adopted internationally. It is with this background the Australian government has begun the process of investigating the need for and feasibility of regulation of battery chargers in Australian and New Zealand. The process has begun with the timeline to regulation likely to be:

- Seek data from AU/NZ stakeholders (2011)
- Refine data and potential policy options (2011)
- Examine California Tier 1 and 2, or USA DoE (2011)
- Publish product profile (2011)
- Seek formal feedback on profile (2011)
- Decide on policy pathway by E3/Governments (early 2012)
- Cooperate with international harmonisation efforts (2012)
- RIS on policy action (mid 2012)
- Regulation/Test standard development

The program and presentations from the forum are available at www. energyrating.gov.au.



# SEAD Update

The Network Standby Collaboration Group (NSCG) is a newly formed subcommittee of SEAD WG4. The group currently has representatives from 6 countries (Australia, Canada, Korea, Japan, UK and USA), however participation in collaboration groups is not restricted to SEAD member countries with other governments that express a willingness to contribute constructively to the work welcome to participate.

The aim of the Network standby group is to:

- · Address gaps in technical knowledge in the area of network standby;
- Foster policy solutions for both local and global network standby waste;
- Promote the development of measurement methodologies for network standby;
- Encourage harmonisation of standards and measurement practices relevant to network standby;
- Examine and promote current best practice technology and products;
- · Share information among participating governments;
- Work cooperatively with other international groups ensuring collaboration not duplication of activities.
- Proactively engage with nongovernment technical advisors and stakeholders.

The group strongly advocates actively engaging with the IEA network standby project and working closely with the 4E standby Annex, understanding that it is vital that the groups coexist without duplication. It is anticipated that the group will develop and begin implementing a work plan by the end of 2011.



# Standby Power Consumption in Australian homes

The recently released report *Third* Survey of Residential Standby Power Consumption of Australian Homes - 2010 details the findings of a survey of 150 households across Australia. The residential survey has been conducted 3 times since 2000, with over 20,000 appliances measured covering more than 300 product types ranging from smoke alarms to ducted air conditioners.

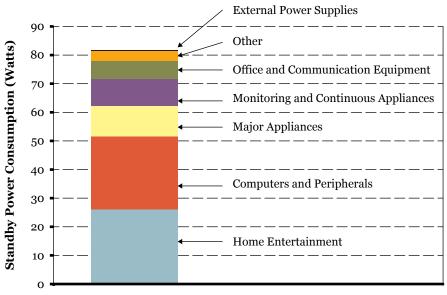
The key findings emerging from the 2010 survey are:

- That both the overall standby consumption and total number of appliances in homes appear to be increasing.
- The average household standby power consumption remains at around 10% of total residential electricity consumption.
- Average appliances per house has increased (67 per home)
- Networked products are on the increase in Australian households with home office and home entertainment

- categories now accounting for over 2/3 of standby power consumption.
- While newer individual products on average use less standby, many individual products continue to use much more power in low power modes than is required to perform desired functions
- Consumer usage behaviours are still a significant unknown – end use metering is the key to quantifying this element

The contribution to total household standby from each major product types is illustrated in the figure below.

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2010 Intrusive Survey Result



### **Standby Power Website**

Have you visited the 4E Standby Power Annex website?

The website provides a valuable source of information for policy makers and technical experts interested in standby power issues. The news feed keeps you updated with the latest standby power events and publications from around the globe. The site also offers a compilation of standby power studies and evaluations and provides links to important relevant data sources and reports. Of course the site also includes all the information regarding the Annex and its work.

http://standby.iea-4e.org/

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There is an increasing prevalence of products that are network connected or capable. These products are generally designed for fast, effective network function, with little concern

for energy consumption and are usually always left on. Rapid changes in the range and ownership of networked product types were found in the recent survey. The table below demonstrates the number of networked capable products found and the connection type being used.

The full report *Third Survey* of Residential Standby Power Consumption of Australian Homes - 2010 is available at www.energyrating.gov.au.

Appliance Type (Capable Devices)	Connection Capable (Total # / % Conn. Capable)	Connected - Mobile	Connected - Wired	Connected - Wireless	Not Connected
Computer - Desktop	121 (83%)	2%	64%	31%	3%
Computer – Integrated	8 (80%)	0%	62%	38%	0%
Computer - Laptop	192 (94%)	7%	12%	79%	1%
Games Console	68 (56%)	1.5%	20.5%	23.5%	54.5%
Media Hubs	3 (10%)	0%	0%	66.5%	33.5%
Television – LCD	10 (8.5%)	0%	20%	0%	80%
Television - LED/LCD	8 (80%)	0%	50%	25%	25%
Television - Plasma	2 (6.5%)	0%	100%	0%	0%

# Next Edition....

- More success from Korea results of latest evaluations
- > Regulation Canadian Style
- > Beyond 1 Watt IEA network standby project
- Upcoming international network standby events

Send us an email at energyrating@climatechange.gov.au if you have suggestions for topics for the next newsletter (February 2012).



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